2. S. 4.

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"Containing the justest and most precise notions of God and the soul; and is altogether one of the most finished works of its kind" Bp. Warburton

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AN

ENQUIRY

INTO THE

Nature of the Human SOUL;

WHEREIN THE

Immateriality of the SOUL

Is evinced from the

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Ζητῶ γὰρ τὴν ἀλήθειαν, ὑφ' ἧς οὐδεὶς πώποτε ἐβλάβη. Marc. Antonin.

LONDON: - Oct. 6th - 1733 - 12 -

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AN
ENQUIRY
INTO THE
Nature of the Human SOUL,
with its
Immateriality or the EDITOR.
Connection with the
PRINCIPLES
OF
REASON and ANIMAL OECONOMY.

Advertiſement to the READER.

THE nature of the ſubject treated on in the following ſheets, and the earneſt deſire of the Author to conſider and remove all objections that might be raiſed, have occaſioned his writing in a manner which Some perhaps may diſapprove of, as too minute and prolix: but he hopes it will be a ſufficient excuſe for the length of the work, that he knew not how to make it ſhorter, conſiſtently with the end he propoſed, viz. *perſpicuity, and his Reader's conviction. We muſt have obſerved from converſation upon this and ſuch like ſubjects, that what one man reckons frivolous and trifling, to another appears a weighty difficulty. Hence every man has his own particular objection againſt any thing advanced, which if not anſwered, all beſides ſignifies nothing* to him. *The Author therefore, that he might ſatisfy every body as far as poſſible, put his papers into the hands of as many as would take the trouble of examining them, with a view that they might point out ſuch objections as would moſt probably be urged by men of different ways of thinking. If what is advanced on theſe abſtruſe ſubjects, be in the main ſolid and rational, that, it is hoped, will atone for other faults in the eyes of equitable Judges. To ſay any more, would be only endeavouring to palliate imperfections with impertinent apologies.*

The Reader is intreated to correct the following Errors with his pen, which escaped in the hurry of casting off the sheets.

Page 2. line 15. for *to move with*, read *to move* it *with*. P. 30. l. 35. for *humana*, r. *humani*. P. 32. l. 20. for *their*, r. *the*. P. 35. l. 5. f. *xerted*, r. *exerted*. P. 46. l. 30. f. *vũr*, r. *vũs*. P. 53. l. 29. f. *overcome*, r. can *overcome*. P. 78. l. 18. f. *unvegitating*, r. *unvegetating*. P. 81. l. 29. f. *his*, r. *this*. P. 138. l. 2. dele [*for any time*] P. 162. l. 15. f. *per mota*, r. *permota*. P. 164. l. 4. f. *to assert*, r. as *to assert*. P. 199. l. 18. f. *quem*, r. *quòm*. P. 224. l. 32. after the words, *superior Powers*, insert [*if this were owned*]. P. 237. l. 36. f. *stain*. r. *stains*. P. 238. l. 36. f. lib. 4. r. lib. ii. P. 255. l. 13. f. *vĩre*, r. *vĩres*. P. 278. l. ii. f. *they*, r. *the spectres*. P. 282. l. 3. f. *upon absurd*, r. *upon* these *absurd*. P. 295. l. 28. f. *suo*, r. *sui*. P. 327. l. 15. f. *images of these objects*, r. *objects of these images*. P. 333. l. 19. f. *the Note (r)*, r. the Note *(s)*. P. 338. l. 29. f. *the no power*, r. *no power*. P. 356. l. 20. *as a thing*, r. is *a thing*. P. 362. l. 20. f. *determined* [then] *by*, r. *determined by*. P. 363. l. penult. dele [of]. P. 369. l. 36. f. *appearance*, r. *appearances*. P. 375. l. 34. f. *velit*, r. *velut*.

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AN

AN

ENQUIRY

INTO THE

Nature of the HUMAN SOUL.

SECT. I.

That a reſiſtance to any change of its preſent ſtate is eſſential to matter, and inconſiſtent with any active power in it.

BY the ſoul we underſtand that which is active and percipient in us, be it what it will (*a*): its activity appears in moving the body, and in the command it hath over its own thoughts; its perceptivity, in being ſenſible of the action of matter upon it, and of its own internal actions in thinking. In ſhewing that matter is not only not endued with theſe properties, but is incapable of being endued with them, let me be permitted to be particular, and to proceed leiſurely ſtep by ſtep; and let the mathematical Reader forgive the inſiſting upon trite and common appearances. It is better to ſeem tedious to the few who are quick in apprehending, and verſed in this matter, than not ſatisfactory to ſlower capacities,

(*a*) Theſe are the unconteſted properties of the ſoul, whatever be the ſubſtance of it; whether material, or immaterial: and this deſcription ſhall be always kept in view throughout theſe papers.

and thoſe who are leſs converſant in abſtract reaſoning. Men do not write for thoſe who know the thing already, but for thoſe who know it not; and perhaps a ſlow perſon, who hammers out things to ſatisfy himſelf, is fitteſt to communicate them to men of his own ſize; nor can truth be leſs, but more certain, for being drawn from the commoneſt, and leaſt conteſted *appearances*, or *principles*. Theſe *appearances* we ſhall firſt ſet down, and thereafter gradually ſhew the neceſſity of their being conſtant and certain.

II. Let, to ſave words, a given body, or maſs of matter, be called A; and let any given celerity be called C. That celerity doubled, tripled, *&c.* or halved, thirded, *&c.* will be 2 C, 3 C, *&c.* or $\frac{1}{2}$ C, $\frac{1}{3}$ C, *&c.* reſpectively. Alſo the body doubled, tripled; or halved, thirded; will be 2 A, 3 A; or $\frac{1}{2}$ A, $\frac{1}{3}$ A, reſpectively. Now to move the body A with the celerity C, requires a certain force to be impreſſed upon it; and to move with a celerity as 2 C, requires twice that force to be impreſſed; and to move it with a celerity as 3 C, thrice that force is required: and ſo on. If it can be made appear hereafter that the firſt force here is neceſſary, to move the body, to wit, with the celerity as once C, the reſt follows eaſily; for we may conceive the body A moving with the celerity 2 C, or 3 C, *&c.* to be the firſt effect doubled, or tripled; which therefore will require the cauſe that produced it to be doubled, or tripled reſpectively. Again, to move the body A with a celerity as $\frac{1}{2}$ C, one half the firſt force is only neceſſary to be impreſſed; and to move it with a celerity as $\frac{1}{3}$ C, one third the firſt force is only required: and ſo on here again. And to move it with a celerity as o C, that is to give it no degree of celerity at all, no force is required at all. Therefore it follows that

III. The body A makes a certain reſiſtance before it can be moved with a velocity as C; for otherwiſe the force would not be neceſſary, if, to wit, it did not make this certain degree of reſiſtance to render it neceſſary. And it makes double that reſiſtance, before it can be moved with a velocity as 2 C; and triple that reſiſtance to be moved with a velocity as 3 C, *&c.* ſtill for the ſame reaſon. And it makes but one half the firſt reſiſtance, to be moved with the velocity $\frac{1}{2}$ C; and but one third of it, to be moved with the velocity $\frac{1}{3}$ C, and to be moved with the velocity as o C, that is to reſt ſtill, it makes no reſiſtance at all.

IV. Or,

IV. Or, if inſtead of different celerities, as in N° 2 and 3, we take the quantity of matter different, the *appearance* is equally conſtant, and certain (from experience, at leaſt) and the conſequence of it the ſame. For the body A requires a certain force to be impreſſed upon it, to be moved with a celerity as C; or ſuch a force is neceſſary: and therefore it makes a certain reſiſtance to be moved with this celerity, otherwiſe the force would not be neceſſary. And a body as 2 A will require twice that force to be impreſſed upon it to be moved with the ſame celerity; or it makes twice that reſiſtance. And a body as 3 A will require thrice the firſt force, or it makes thrice the firſt reſiſtance, to be moved with the celerity C: and ſo on. For the force muſt be increaſed proportionally with the quantity of matter, or body to be moved, to make it move with the ſame common celerity: and therefore the reſiſtance is increaſed proportionally with the body to be moved, the celerity remaining the ſame. We may eaſily conceive that a body as 3 A, 4 A, *&c.* would make three or four bodies equal to once A, each of which would require once the firſt force, or make once the firſt reſiſtance. Alſo, $\frac{1}{2}$ A, $\frac{1}{3}$ A, $\frac{1}{4}$ A, *&c.* will make but one half, one third, one fourth, *&c.* the firſt reſiſtance, to be moved with the celerity C; becauſe only one half, one third, one fourth, *&c.* of the firſt force reſpectively is neceſſary to move ſuch part, with that ſame celerity.

V. The body A requires the quantities of force abovementioned (N° 2 and 3.) to be moved with the reſpective velocities; that is, it makes the proportional reſiſtances there mentioned, before it yield to be moved with theſe velocities; as alſo the different bodies or quantities of matter in N° 4. require the reſpective forces to be impreſſed, or make the reſpective reſiſtances there mentioned, before they can be moved with the ſame common celerity; whatever direction the moving force is applied in; whether upward or downward (of which direction in particular more by and by, N° 16) backward or forward, obliquely or horizontally, in all poſſible variety of directions.

VI. Moreover, all this is likewiſe certain taken the contrary way, *viz.* from motion to reſt; as far at leaſt as experience reaches. For the body A, moving with a certain velocity as C, requires a certain degree of force or reſiſtance in an obſtacle, to take off or ſtop that motion; and

moving with a velocity as 2 C, or 2 A moving with a velocity as 1 C, it requires twice that force or ſtrength in an obſtacle to ſtop the motion; and A moving with a velocity as 3 C, or 3 A moving with the velocity 1 C, thrice the firſt reſiſtance only will bring it to reſt, *&c.* And A moving with the velocity $\frac{1}{2}$ C, or $\frac{1}{2}$ A moving with the whole velocity C, one half the firſt force will ſerve to take off the motion; or if A moves with $\frac{1}{3}$ C, or $\frac{1}{3}$ A with the whole celerity C, one third the firſt force ſtops it: and moving with the velocity o C, or reſting, no force at all is required. That is, the ſame body A moving with the celerities 1 C, 2 C, 3 C, *&c.* or 1 A, 2 A, 3 A, *&c.* moving with the ſame celerity C, makes once, twice, thrice, *&c.* reſpectively a certain degree of reſiſtance, before it can be brought to reſt: and A moving with the celerities $\frac{1}{2}$ C, $\frac{1}{3}$ C, $\frac{1}{4}$ C, *&c.* or $\frac{1}{2}$ A, $\frac{1}{3}$ A, $\frac{1}{4}$ A, *&c.* moving with the ſame celerity C, makes but one half, one third, one fourth, *&c.* of the firſt reſiſtance to be brought to reſt and have all the motion taken off. And this again through all the poſſible variety of directions in which the body can be ſuppoſed to move.

VII. Theſe are the moſt general, certain *phenomena* of motion, agreeable to univerſal experience, the common ſenſe of men, and to reaſon itſelf. For, as hath been ſaid, if but *any one* of theſe caſes can be ſhewn to be abſolutely neceſſary; all the reſt become ſo of courſe. If it requires a certain degree of force to move a given body with a certain celerity, or to ſtop that body moving with that celerity (which is too evident to be conteſted from experience); it is certain it muſt require twice, thrice, four times, *&c.* that force; or one half, one third, one fourth, *&c.* of it, to move the body with twice, thrice, four times, *&c.* that celerity; or with one half, one third, one fourth of it only, reſpectively; or to ſtop it moving with theſe reſpective celerities, ſince effects are proportional to their adequate cauſes: and therefore that the body, or any multiple, or ſubmultiple of it, makes the reſpective reſiſtances, mentioned above, to be moved with that celerity, or with any multiple, or part of it; and that it makes equal reſiſtances, when moving with theſe reſpective celerities, to be brought to reſt again: and this with reſpect to all poſſible directions. To make the argument in any one inſtance, ſuit in any other, it requires but to take equal multiples, or equal parts, of cauſe and effect, force impreſſed and reſiſtance made. *If the immateriality of the ſoul, the exiſtence of God, and the neceſſity of a moſt particular, inceſſant providence in the world, are demonſtrable from ſuch plain and eaſy principles, the Atheiſt hath a deſperate cauſe in hand.*

VIII. All

VIII. All that is ſaid then amounts at laſt to this, *that the body* A *makes a reſiſtance to any change of the ſtate it is in, whether of reſt or motion, in all poſſible ſuppoſitions:* and the ſame body makes proportionally different degrees of reſiſtance in all poſſible different ſuppoſitions: and it never ceaſes to make reſiſtance, but when there is no change in the ſuppoſition; that is, when the ſtate the body was in is ſuppoſed not to be changed. When the body is at reſt, it makes reſiſtance to be moved with any celerity as C: and when it moves with any celerity as C, it makes a reſiſtance to move with any other celerity, as 2 C, or ½ C. Nor doth it make leſs reſiſtance, if moving, to be brought to reſt again. And this is true of all poſſible directions the body can be ſuppoſed to move in. That is, body, or matter, makes a reſiſtance to any change of the ſtate of reſt or motion it is in: or exerts a certain force, if acted upon (which is not fully enough expreſſed by being barely called a tendency) to continue, and defend itſelf (to uſe ſuch a metaphorical term) in the ſame ſtate of motion or reſt in which it is: and would, becauſe of this reſiſtance, remain in that ſtate for ever, unleſs ſome external cauſe or agent (that is, by the terms, *ſomething not matter)* impreſſed a force upon it, to make a change in its preſent ſtate *(b)*. Of this external cauſe to matter, next. But firſt ſome obſervations are to be made upon what is already ſaid; the conſequences of this reſiſtance are to be enquired into; and eſpecially the conſequences of a contrary ſuppoſition, that matter, namely, was diveſted of ſuch reſiſtance: whereby it will appear, that matter without it would be fit for none of thoſe uſes it is now fit for; that the material world, a plant, or (particularly) an animal body, would be impoſſible things without it; and in fine, *that matter, as a ſolid, extended ſubſtance, muſt reſiſt.*

IX. And firſt, though this reſiſtance in matter is real reſiſtance, or certain and real force exerted, yet it is *no action* in matter, nor is matter active in exerting it: it is rather only *re-action*, reſiſtance in the propereſt ſenſe; for it is never exerted till matter is firſt acted upon. Matter is ſo far from being active becauſe of this reſiſtance, or from having the power of beginning action, that the reſiſtance is *all* exerted, and *always*

(b) If once we ſuppoſe matter exiſting, every change of the manner or ſtate of its exiſtence requires an immaterial cauſe, as ſhall be ſhewn in this ſection; and in the laſt ſection of theſe papers it ſhall alſo be ſhewn, that the ſimple exiſtence of matter, without conſidering any change of ſtate in it, requires an immaterial cauſe, or *creating power*: ſo that matter conſidered in any reſpect diſcovers to us an immaterial Being.

exerted,

exerted, that no action may be begun in it by any thing elſe. This reſiſtance makes it beſt of all appear that matter never acts, or effects a change of ſtate in itſelf, but reſiſts action, and all poſſible change of its preſent ſtate, whether of motion or reſt. It is a kind of poſitive, or ſtubborn inactivity. If it is to be called a power, it is a power not to act: which lets us ſee how improperly the word power is applicable to it, at leaſt in that ſenſe it is applied to any thing elſe. And if this be found to be the only poſſible power in matter, it lets us ſee how ſafely we may pronounce it void of all power, in the propriety of the word. It is called in the new Philoſophy, moſt ſignificantly, a *vis inertiæ*, as it were a negative activity; ſomething receding farther from action than bare inactivity. For, not to move itſelf, when at reſt, nor ſtop itſelf when in motion; and beſides, not to be moved, or ſtopped by any thing elſe, but with reſiſtance, is more than ſimply not to act. We cannot conceive any thing more negative of action than this. It is true this ſtubborn inactivity cannot be ſo great but that ſome power muſt overcome it, ſince we ſtill ſee matter moved by ſome power; but as much as it may ſeem a paradox at preſent, it will appear in a little, I preſume, that, ſtrictly ſpeaking, the ſtrongeſt man could overcome but a mighty inconſiderable part of this inactivity of matter (perhaps not ſo much as the weight of one ſingle grain) without the concurrence of a greater power than his own (*c*.) This will ſurprize thoſe who conſider the inactivity of matter, but for the firſt time, to hear that it is ſo powerfully inactive a thing.

X. Nor is matter the leſs inactive, becauſe it acts upon other matter, if that be in its way while it moves. It is as ſtubbornly inactive while in motion, and reſiſts as much a change of its ſtate then, as while at reſt. This very thing comes to paſs, becauſe it is more than barely inactive, becauſe of its poſitive inactivity: for if it were but ſimply inactive, its acting upon other matter would be an impoſſibility, as ſhall be obſerved immediately. This again ſhould convince us of the inactivity of matter; ſince if it had not, beſides bare inactivity, a force moreover to remain inactive, *the action of matter upon matter would be a thing contradictory*. It hath this force which ſoever of the ſtates it is in, whether of reſt, or motion. And certainly, to effect reſt, or ſtop motion where it is, is as great an effect, and requires as much power in the cauſe, as to effect motion, or produce it where it is

(*c*) See N° 24. ſect. 2.

not. We have familiar inſtances of this, in offering to ſtop the motion of a ball, when ſmartly ſtruck, or in feeling the reſiſtance it makes to be brought to reſt again: and if ſuch bodies are diſcharged with great violence, men are killed, walls battered down, *&c.* ſo difficult is it to bring bodies to reſt, where the motion is great (*d*)! Moſt of the methods of death and ruin are effected by the inactivity of moving matter. *Though matter then acts upon matter by motion; yet it is becauſe of its very inactivity that it doth this.*

XI. And farther, ſince matter reſiſts motion in any direction, or reſiſts motion in all directions equally, matter in motion will reſiſt any change of direction. This is plain in all the poſſible caſes of the congreſs of bodies, or where they encounter each other in their motions; for in all theſe caſes they act on each other: and this action proceeds from the reſiſtance they make to being put out of the direction they are moving in. That is, they reſiſt a change of the direction of their motion. Whatever force matter hath to continue in the ſtate of motion it is in, it exerts it all, or a part of it at leaſt, upon any body oppoſing that direction either directly or obliquely: and indeed if matter did not reſiſt all change of direction, it would not reſiſt at all in being brought from motion to reſt; ſince there is no other way of ſtopping its motion, but by oppoſing its direction; and to ſtop all poſſible directions of motion is to ſtop or hinder all motion; motion in no direction being the ſame as no motion, reſt. This is ſtill more manifeſtly plain in what is called the *compoſition* and *reſolution* of forces; for whatever changes the direction of a body in motion, without adding a new force to it (*e*), takes off one of the compounding forces. Therefore matter

(*d*) See Dr. *Keil*'s explication of the firſt law of nature, *Introd. ad ver. phyſ.* lect. 4. where, after other things, he ſays, *Nec magis poteſt corpus ſemel motum, motum ſeu energiam ſuam ad movendum deponere & per ſe ad quietem redire, quam poteſt figuram ſemel ſibi inductam exuere, & aliam recentem abſque causâ extrinſecâ acquirere.* And a little after: *Non minor requiritur vis ad corporis alicujus motum ſiſtendum, quàm priùs neceſſaria fuit ad eundem motum corpori imprimendum: unde cùm vis inertiæ æqualibus mutationibus æqualiter ſemper reſiſtit, illa non minus efficax erit, ut corpus in motu ſemel incepto perſeveret, quàm ut corpus quieſcens ſemper in eodem quietis ſtatu permaneat.*

(*e*) It will be readily allowed, that in the congreſs of unelaſtick bodies, the direction is changed, without any new force added: and we ſhall ſee what is to be ſaid of the force of reſtitution in the ſhock of elaſtick bodies, a little further on. Moreover, next to the giving matter motion of it ſelf, this is the moſt fundamental miſtake in the *Epicurean* phyſicks, to give it a power to change its own direction. See *Lucretius*, *l.* 2. *ver.* 216 to *ver.* 221,

is

is not barely inactive only in changing the direction of its motion, but, more, it reſiſts all change of direction; and is as ſtubborn in preſerving the ſame direction, as the ſame degree of motion; ſince the one cannot be changed without the other. *Theſe are diſcouraging affections of matter, to thoſe men who would make a ſupreme Being of it!*

XII. Further, which is worth our attention, the reſiſtance of the ſame quantity of matter, or body A; if once we fix upon a certain ſtate, either of reſt or motion, as a *terminus à quo*; may be indefinitely great, or is as endleſly increaſible, as the degree of celerity is, with which it may recede from that *terminus*. For the reſiſtance is always equal to the force neceſſary to be impreſſed; and the force muſt be proportionally increaſed with the degree of celerity. To be moved with a thouſand, or a million of times the celerity C, a thouſand or a million of times the firſt force is neceſſary to be impreſſed; and therefore it will make ſo many times the firſt reſiſtance. And it is the ſame contradiction to aſſign the greateſt reſiſtance it can make, as to aſſign the greateſt celerity it can be moved with; or really to aſſign the greateſt number. Thus the reſiſtance of the ſame body, or quantity of matter, conſidered in this view, may be increaſed *in infinitum*. The truth in this paragraph becomes plain alſo from conſidering that reſiſtance is the ſame with re-action; for ſince action and re-action are equal, the re-action of matter may ſtill be greater and greater, as the action upon it is greater and greater.

XIII. But contrarily, if we conſider the ſame quantity of matter or body A, abſolutely, and without any reſpect to a fixt ſtate, the reſiſtance of it is immutable, and always as much the ſame, as the ſolidity or extenſion of it: ſo that it is impoſſible that any force impreſſed upon it *ab extra*, ſhould take it ultimately off, or leſſen it, or increaſe it; or, in a word, make it other than it always was, before ſuch force was impreſſed. It is true, the reſiſtance it makes to a change of its preſent ſtate may be overcome; but then it makes juſt as much reſiſtance to perſevere in that new ſtate, as in the former: and that reſiſtance again may be overcome, and a new ſtate of motion or reſt induced upon it; yet it will as obſtinately continue in that ſtate, as in any of the other two. And ſo on endleſly. If any force *ab extra* overcomes the renitency of the body A, to be moved with a velocity as a 1000 times C, it will move on with that velocity; which ſtate of motion is now as much to be conſidered as its ſtate, as

the former reſt was: and it will juſt reſiſt as much to be moved with a velocity as 2000 times C, or to have the velocity C another thouſand times increaſed, as it did at firſt; or to be brought back again, from moving with the velocity 1000 C, to reſt, as it did to be brought from reſt to move with that velocity. *In a word, as long as a change is poſſible, which is always and endleſsly, ſo long muſt it reſiſt; and it muſt reſiſt equal changes equally:* which was exactly the reſiſtance it was endued with, before any change was effected in it at all, and before any force was impreſſed upon it at all. So that this reſiſtance cannot be impaired, augmented, or any way altered, by any new force impreſſed *ab extra*. Which is already a ſtrong ſymptom that reſiſtance to a change of its ſtate is of the nature of matter, as inſeparable from it as ſolidity or extenſion; ſince as long as the ſolid extenſion, that is the quantity of matter, in the body A, remains the ſame, this immutability of its reſiſtance muſt be ſuppoſed, if it is at all reſiſting matter.

XIV. But yet farther, as this reſiſtance in matter to change its ſtate cannot be ultimately taken off, leſſened, or any way altered, by any force impreſſed *ab extra* upon it; ſo neither could it ſubſiſt in matter jointly with any quality, power, conatus, or tendency to change its ſtate. For firſt, ſuppoſing it poſſible that two contrary tendencies could be planted in matter; one, whereby it reſiſted a change of its ſtate, in any poſſible direction, and another, whereby it tended to change it; this would be to no effect, nor to any other purpoſe than *doing* and *undoing*. Theſe two contrary conatus's would deſtroy each other if equal; or if unequal, the ſtronger would deſtroy the weaker, and the exceſs of it only would remain. So that the reſiſtance to a change would either prevail, and then it would be the ſame thing as if no ſuch contrary tendency had been planted in matter; or the conatus to a change of the preſent ſtate would prevail, and then the remaining in any given ſtate poſſible would itſelf be impoſſible; which is a thought full of contradiction (*f*). Thus two contrary tendencies (ſuppoſing they could be both

(*f*) This is very inconceivable, and really a ſelf-deſtructive ſuppoſition. For to be indefinently changing its ſtate ſuppoſes really no change of ſtate at all in the body; becauſe no precedent ſtate could then be of any poſſible finite duration: otherwiſe, if it were permitted to become of any finite length, and deſerve the name of a precedent ſtate, there would not be an indefinent change effected; or the body would have a tendency to preſerve its ſtate for ſome time, contrary to the hypotheſis. To ſuppoſe an infinitely quick change of ſtate, from reſt to motion, and from

both planted in the ſame individual ſubject, as matter) would have the ſame effect upon each other, as two contrary quantities, a poſitive and a negative; or as two forces impreſſed upon the ſame body in oppoſite directions; to wit, to cancel each other mutually. For a reſiſtance to a change of ſtate would reſiſt a conatus toward it, in any poſſible direction, by N° 5 and 11.

XV. This would be the reſult, if it were poſſible, that two contrary conatus's could be planted in matter at once: but that is really impoſſible and contradictory. For that a particle, or atom of matter (and the reaſon is the ſame in any aſſigned quantity) ſhould have a tendency to move in any one given direction, and at the ſame time that it ſhould have another tendency not to move in that, or any other direction, is *to have* a tendency, and *not to have* it, at once. Two ſuch contrary and inconſiſtent tendencies, planted at once in one and the ſame individual ſubject, is a notion deſtructive of itſelf; and therefore not to be effected by infinite power: for to effect impoſſibilities is not the object of any power. The argument is the ſame, whether the firſt ſtate of the body is ſuppoſed reſt or motion: for if it is ſuppoſed firſt moving, it cannot have a tendency to move in that direction only, and with that particular degree of velocity only; and yet have a tendency to move in another direction, and with another degree of velocity. The one excludes the other. In a word, a body cannot have a tendency *to change* its preſent ſtate, and at the ſame time a tendency *not to change* it, more than two contradictory propoſitions can both be true: for *theſe two* are really ſuch. This is a remarkable property of the reſiſtance of matter, *That it is inconſiſtent with any power or force in it*; and ſhould never be forgot by us. It infers many notable conſequences, which it ſeems we are not ſufficiently aware of at all times: and, among others, an utter impoſſibility that matter can ever become,

motion to reſt, is to ſuppoſe abſolute reſt only. For when motion was but naſcent, reſt would be again induced, becauſe the inceſſant tendency to change inceſſantly takes effect: and before *reſt* were ſettled, motion, for the ſame reaſon, ought to begin. So that, as was ſaid, this notion deſtroys itſelf. How remarkable is this co-incidence, when the only ſuppoſition that could ſerve a ſceptick's turn, of neceſſity defeats itſelf! For if this tendency to change its ſtate is the ſtronger of the two, it muſt overcome the other at all times, and infer the contradiction ſhewn, in ſpite of all evaſions: and the concluſion is, that *ſuch a ſuperior tendency cannot be planted in matter*.

by

by any power, a living, self-moving substance; seeing, as will appear, matter must resist all change of its present state, as it is a solid substance. If this had been attended to, an infinity of doubting and disputing might have been saved to mankind.

XVI. This will change our physicks a little, and establish a new Theory of matter. For it will follow that all gravity, attraction, elasticity, repulsion, or whatever other tendencies to motion are observed in matter, commonly called natural powers of matter, are not powers implanted in matter, or possible to be made inherent in it; but (therefore) impulse, or force impressed upon it *ab extra*. We are apt to think that it is a certain natural quality, or power, implanted in the matter of a stone, *v. g.* and inherent in it, that makes it tend to the earth (*g*): but, by what is said in the last paragraph, it appears that it resists this motion, as much as it would a motion in any other direction, with the same velocity: or that matter is as much *impelled* in this case, as in any other, by some cause or virtue, *ab extra*, *i. e.* by something not matter. The effect of gravity is not to destroy the resistance of matter, or to make it unresisting matter, but to overcome its resistance to be moved in certain circumstances; where it still

(*g*) Even so great a man as *Borelli* seems to have been of this opinion. In the chapter *de causis & principiis motûs* (the 2d of his book *de vi percussionis*) he says, *Tandem summâ contentione controvertitur, an aliqua corpora moveri possunt à seipsis, vel potius quicquid movetur, à distincto separatoque motore propelli debeat: & profectò, ut à postremo exordiamur, evidentissimum est aliqua corpora à distincto, & externo motore impelli, sic ea omnia quæ volumtur, percutiuntur, aut projiciuntur, manifestissimè ab externo impulsore promoventur; sed an reliqua omnia, quæ in mundo moventur, pariter ab extrinseco principio, & causâ propellantur, hoc profectò impossibile & incredibile videtur, quandoquidem corpora gravia, & animalia per se videntur moveri, scilicet à causâ & principio intrinseco, &c.* What difference there is to be assigned between the moving principle in an animal, and in a heavy body descending, we shall see below; only I think it was not right to conclude them under one head. The expression [*subsistantia animastica.*] which farther on he says is both *agent* and *patient*, without a clear idea of it in the mind of the person that writes, and an explication of that idea, to communicate it to the person that reads, is of no use in philosophy; or of bad use: but of such things Mr. *Locke* hath said enough. No man can conceive that the same thing should be both *movens* and *motum*. There is a plain contradiction in this assertion, *cadémque subsistantia corporis gravis, migrat & descendit, à seipso impulsa.* A *moved* resists motion; a *mover* overcomes that resistance: these opposites can never consist in the same individual thing. If the distinction of agent and patient is necessary in *projection*, and *percussion*, and the effects of art, it is also necessary in the works of nature. Two things, *necessarily two* in the one case, cannot become *one* in the other.

reſiſts as much every new change of ſtate, as if its reſiſtance to the former had not been overcome. And this is the caſe in all force impreſſed *ab extra*, by N° 13. When the reſiſtance of the body A, to be moved with a celerity as a 1000 times C, is overcome, though it reſiſts no more to be carried on with that celerity, which is now to be conſidered as its permanent ſtate; yet it reſiſts as much to be put out of this ſtate, as it did formerly to be brought to it. And this is juſt the caſe in the deſcent of heavy bodies: any velocity from the beginning of the fall would be a permanent ſtate of the body, if new impulſes *ab extra* did not add ſtill farther degrees of velocity. This truth is alſo plain from this conſideration, that if a body, moving more ſwiftly than another body moves by the force of gravity, attraction, elaſticity, *&c.* overtakes it; the body ſo overtaken will make reſiſtance to the impulſe of the overtaking body, even though the direction of their motions conſpire. For inſtance, if we call the celerity which a piece of wood hath acquired in falling down through a certain ſpace, K; and the celerity, with which a bullet leaves the muzzle of the gun, C; and then ſuppoſe the bullet moving with the ſum of theſe two celerities (C + K) to overtake the piece of wood in the end of that ſpace; it is demonſtrable that the bullet would pierce the wood, even though their motions were conſpiring. For, the relative velocity of the ball and piece of wood being the ſame, both when it is diſcharged againſt the piece of wood at reſt, and when it overtakes it in its deſcent, the greatneſs of the ſtroke, and the effect of it will be the ſame; namely, that the ball will pierce the wood. One may be alſo more familiarly certain of this, if he lets a ball drop out of his hand, and ſtrikes it before it reach the ground; for he will feel it reſiſt the ſtroke very ſenſibly. This lets us ſee that matter reſiſts even the force of gravity, or any other acting in the ſame direction, as was aſſerted N° 5. and conſequently, by what was ſaid in N° 15. that the force of gravity (*the ſame is to be underſtood of elaſticity, fuga, attraction,*) is a force impreſſed *ab extra*, and no conatus, or tendency belonging to matter, or inherent in it. But all this will ſtill appear more evidently when we come to conſider what *moment* (impetus, or force in a moving body) is: for all *moment* proceeds from the reſiſtance in matter to change its ſtate; and whatever matter hath force, or *moment*, in its motion, muſt be reſiſting matter. And conſequently matter reſiſts to be moved by the powers of *elaſticity*, *gravity*, *repulſion*, &c. for in all theſe the *moment* is plain by the effect produced. It is the effect produced by

by the *moment*, or force, that shews the powers of elasticity, gravity, *&c.* these impulses should be otherwise undiscoverable by us: and it is the *moment* also that inevitably shews the matter to be resisting matter in *these very instances*. So that there is no hazard of our being deceived in concluding universally that all the tendencies to motion observable, or possible to be observed, about matter, are not the powers of matter, or properties residing in it, or possible to be planted in it by any being: but *strictly impulses upon it* ab extra.

XVII. However, let us suppose what some philosophers think not impossible, and see how far it will influence this conclusion; *viz.* that the power of gravity in particular may be the effect of some fluid, or very subtil matter, impelling those bodies we call heavy (*h*): and let the same be supposed possible

(*h*) Dr. *Pemberton*, in his view of Sir *Is. Newton*'s philosophy, says, that great man himself conjectured this might be so. His words are; *He* [Sir *Is. Newton*] *thinks it not impossible that the power of gravity itself should be owing to it* [a very subtile spirit, to wit, of a great elastick force, diffused through the universe.] Conclusion. N° 2. And in N° 3. he says, *To acquiesce in the explanation of any appearance, by asserting it to be a general power of attraction, is not to improve our knowledge in philosophy, but rather to put a stop to our farther search.* But with all due submission, our search is carried as far as it can go, if it stops only at the first cause, having been rightly carried thither: and there it must stop, if it is rightly made. The elasticity of this spirit itself *ought to have been ascribed* to the agency of the first Being. Our searches do not suppose an endless indagation of *cause above cause*; but only to attain, if possible, to a First, the fountain of causation. I also humbly beg leave to dissent from Mr. *Derham*'s sentiments about gravity. He says, (b. 1. ch. 5. note 1.) *This attractive or gravitating power, I take to be congenial to matter, and imprinted on all the matter of the universe, by the Creator's fiat at the creation.* Not only the reasons above, N° 14 and 15, but the constant appearances in the descent of bodies, shew *that this is an incessant impulse upon matter, not the permanent effect of a transient, simultaneous impression.* For it is obvious that an equally accelerated motion could never be effected by one single and instantaneous impression; but by a successive, equable repetition of impulse. He continues, *What the cause of it is, the* Newtonian *philosophy doth not pretend to determine, for want of phænomena, upon which foundation it is, that that philosophy is grounded, and not upon chimerical and uncertain hypotheses.* [Why suppose it imprinted upon all matter by the Creator's fiat at the creation, and yet seek another cause for it?] *But whatever the cause is,* (the following words are a citation from Sir *Is. Newton*'s principles) *that cause penetrates even to the centers of the sun and planets, without any diminution of its virtue; and it acteth not according to the superficies of bodies, (as mechanical causes do) but in proportion to the quantity of their solid matter; and lastly it acteth all round it at immense distances, decreasing in a duplicate proportion to these distances.* Here Sir *Is. Newton* himself seems to refuse a mechanical cause of gravity; and for that very reason, for which Dr. *s'Gravesande* rejects it, as shall be observed immediately.

also in elasticity, repulsion, and all the other tendencies to motion observable in matter. And first, it is plain such an hypothesis makes these powers not inherent, or lodged in the matter of the bodies themselves, as properties of it, or as accidents are said to be inherent in their subject; but impulses *ab extra* upon the bodies so *heavy*, *elastic*, *repelling*; as here is concluded. This doth not suppose *two inconsistent tendencies* in matter; one *not to change* its present state, and another *to change* that same state: but leaves it as much resisting matter to all change of state, as here it is contended to be; and supposes this resistance only overcome by the impulse of other matter. And, secondly, as to this other matter of such subtile fluid, it is evident, it must be as much resisting matter to all change of its state, as the matter of these bodies themselves, which we know, is shewn to be. The *moment* or *force*, which it hath in its motion, and with which it impels these bodies, manifests this. Let it be observed; *the powers of gravity*, *elasticity*, *repulsion*, *attraction*, *can no more be lodged in the matter of this fluid than in the matter of the real bodies we have been speaking of*, and that for the same reason, assigned above: for this is as contradictory in respect of one sort of matter as another, in respect of a very small particle as of a much greater one, being a palpable contradiction in respect of all matter equally. The matter of this fluid then being, in all respects, matter that resists a change of its state, we must still as much seek a cause of its motion *ab extra* to it, that is, in effect, in *something not matter*, in some immaterial cause, or being, (unless we would be openly absurd, and suppose one thing, itself caused or moved, the cause of another thing moved, *in infinitum*, which includes in it all the contradiction of the Epicurean scheme); I say, we must as much seek a cause *ab extra* to it, of its motion, as of the motion of those bodies we are acquainted with, and have reasoned from: so that we are removed but one step from the *immaterial cause* we were looking for; and the conclusion above is secured, allowing the thing supposed here could be proved real. But then there are strong reasons that shew this hypothesis to be without foundation. Dr. *s'Gravesande* gives several, which, I think, intirely overthrow it (*i*). One is,

(*i*) I shall transcribe the whole passage. It is in *l.* 4. *c.* 4. at N° 1237. *Ulteriùs, si gravitas tendeat à lege motûs notâ, ad impactum corporis extranei referri debere, & quia gravitas est continua, impactum etiam continuum requiri. Si talis materia continuò in corpora impingens detur, necessariò est fluida, & quidem subtilissima, quæ penetrat corpora quæcunque; corpora enim in aliis utcunque inclusa gravia sunt. Videat nunc mathematicus, an fluidum adeò subtile, ut corporum omnium poros liberrime permeet, & adeò rarum, ut motui corporum sensibiliter non obstet, (in loco enim aëre*

is, *That the action of a fluid upon a body could never make it gravitate towards another, more or leſs, in proportion as the quantity of matter in that other were itſelf more or leſs*; which is allowed even by thoſe, who ſuppoſe the power of gravity may be the effect of the action of ſome fluid. If a cauſe produces an effect, it is highly reaſonable that ſuch effect ſhould follow the proportion of its cauſe: but quite unreaſonable that it ſhould follow the proportion of another thing, no way concerned in producing ſuch effect. There is another argument which this Author adduces, and every body owns, that ſhews gravity is not to be aſcribed to the mechanical action of matter upon matter; namely, *that gravity acts internally, and according to the ſolidity of the matter itſelf; whereas the action of other matter upon it ought to be according to the ſuperficies of the parts*, ſince there is not a penetration of dimenſions, unleſs we would deny the ſolid extenſion of all matter. Then indeed the more ſurface any body had, that is, the more porous the contexture of it were, the mechanic action of any fluid matter upon it, and therefore the gravity of it, ought to be the greater: which is directly contrary to experience. Theſe reaſons, abſtracting from thoſe above N° 14, 15 and 16, ſhew that gravity is not the action of matter upon matter, but the virtue and power of an immaterial cauſe, or being, conſtantly impreſſed upon it (*k*.)

XVIII.

aëre vacuo penduli motus diutiſſimè continuatur) corpora ingentia tantâ cum vi ad ſe mutuò poſſit propellere? [This is his firſt argument, which ſeems very concluſive·] *Explicet quomodo hæc actio creſcat in ratione maſſæ corporis versùs quod aliud fertur. Tandem, quod omnium mihi difficillimum videtur, dicat, quomodo omnia corpora, in quocunque ſitu, eâdem manente diſtantiâ, & corpore, versùs quod gravitas datur, eâdem velocitate ferantur; id eſt, quomodo liquidum, quod niſi in ſuperficies ipſorum corporum, ſive illarum internarum particularum, ad quas acceſſus ex interpoſitis particulis non impeditur, actionem ſuam exerere poteſt, communicet corporibus motûs quantitatem, quæ in omnibus corporibus exactiſſimè ſequatur proportionem quantitatis materiæ in his, quod in gravitate ubique obtinere, hoc capite probavimus, & quod directo experimento demonſtravimus, reſpectu gravitatis in telluris viciniis.* And thence he concludes (N°1238) *Non tamen negamus, ab ullo impactu pendere gravitatem; ſed illam non ſequi ex ullo impactu, juxta leges nobis notas, clarè patere contendimus, gravitatiſque cauſam nos omnino latere fatemur.* Moreover, with reſpect to this ſubject of gravity, it is to be obſerved, that it was the capital miſtake in the *Epicureans* to make it, and therefore motion, eſſential to matter. See *Lucret. l.* 1. *ver.* 986. to *ver.* 996. and from *ver.* 1074. to *ver.* 1079: and again *l.* 2. *ver.* 132. to 138. and *ver.* 202. This hath made him ſuppoſe a monſtrous univerſe, where matter is ſtill falling down, by its innate gravity, through the infinite abyſs of ſpace; as if that had the relative denominations of *above* and *below*. Nor is *Des Cartes* much happier in his mechanical ſolution of gravity, who makes a ſubtile fluid, in its circumgiration, recede from the earth, and ſo beat down other bodies to it; though this ſhould rather carry them from it.

(*k*) After all that hath been ſaid, there is a difficulty ſtill urged with reſpect to gravity, which

XVIII. To return then; as from N° 14 and 15. it appears, that this resistance to a change of its present state of rest or motion, is the only tendency

which with much submission I humbly beg leave to consider. It is said, Sir *Is. Newton, at the end of the last edition of his Optics, gives many reasons, which induced him to believe there was a subtile elastic fluid, which might be the cause of gravity, and the cause of many other phænomena, particularly those of heat and light, at the same time. By reducing more phænomena to one principle, cause, or instrument, the beauty of nature is set in a greater lustre. Though this principle may be immediately deduced from the first cause,* s'Gravesande's *arguments do not hold against this fluid, as Sir* Isaac *describes it. As it pierces all bodies and touches their elements, or least particles, it may act on them with a force proportional to their number, or to the matter of the body on which it acts. It is rarer in great bodies than in small ones, and therefore may act with a force proportional to the body towards which it impels.* To begin with the last of these reasons: It doth not appear sufficient, in order to account how this fluid may act with a force proportional to the body to which another is impelled, to assert that it is rarer in great bodies than in small ones: it must be farther asserted, that this fluid is rarer or denser in the same body, whether small or great, according as the body to which that is impelled, is itself small or great. In the earth, as gravitating to the moon, it must be very rare; and in the earth again, as gravitating to the sun, it must be very dense: How can the same fluid be both dense and rare in the same body at once? Besides, it must be asserted, that this fluid is denser in dense bodies, whatever their magnitude be, than in rare ones; for these gravitate most: which seems directly contrary to reason; since the denser any body is, the less freely any fluid, ever so subtile, should pervade it, to give every particle an impulse; and contrarily, the rarer the more freely. Moreover, if there be any solidity in bodies at all, which it would be strange to deny, a fluid cannot pervade, I think, to the innermost particles of these solid parts, to give these their impulse, without supposing a penetration of dimensions: acting according to their number, is acting according to the very solidity of bodies.

In this particular, let me reason as things appear to myself; because possibly they may appear the same way to others. If *every particle* through the whole solidity of a heavy body, received its impulse from the particles of this fluid, it should seem that the fluid itself must be as *dense* as the very densest heavy body, gold for instance; or that there must be as many *impinging* particles in the one, as there are *gravitating* particles in the other, which receive their gravitation by being impinged upon: which does not suit with the phænomena of motion in general, and with the motion of pendulums in particular, and gives Dr. *s'Gravesande*'s arguments before cited great strength; but it seems then that throwing gold, or any heavy body upward, against the impulse of this fluid, would be like throwing gold *through* gold. And since this medium must be as dense when it impels cork, as when it impels gold, to throw a piece of cork upward, must be as if we endeavoured to make cork *penetrate* a medium as *dense* as gold. The expedient found out to make this medium appear more probably the cause of gravity, hath been to imagine all bodies exceedingly porous and rare: and this notion is carried so extravagantly high, as to suppose *that all the matter in the known universe might not take up one cubical inch of space.* (See Dr. *Pemberton*'s review of Sir *Is. Newton*'s philosophy, *b.* 3. *ch.* 2. at the end: and what is said concerning a

dency planted in matter; or, to speak more truly, proper to it as matter; and that it is inconsistent with any other conatus, or tendency to change it:

progression of pores by Sir *Isaac Newton* himself, at the end of his Optics.) But might not one say, that this is contriving one hypothesis to support another hypothesis, and then contending (in the present Objection, I mean) for the reality of both? Besides, it no way takes off the difficulty I just now urged, that the fluid must be as dense as the very densest body to give every particle its impulse of gravity. But then what is to be said, if we suppose a body perfectly solid, or without any pores? Gravity is allowed on all hands to be as the quantity of solid matter. Now if there were a cubick inch of such a perfectly solid body, and a cubick inch of a body that had a hundred times more pores than solid matter, the first should gravitate an hundred times more than the last, as having an hundred times more solid matter; and yet from the impulse of this medium, it should gravitate an hundred times less at least, as having an hundred times less surface: for the medium could only act on a surface of an inch square.

There is no way of aviding this consequence, but by saying *arbitrarily* that there is an hundred times more surface in the square inch of the perfectly solid body; or that the medium impinges on an hundred times more solid particles in this square inch of surface, than in all the solid inch of the rarer body: but even that is contradictory; for by supposition, there is but an hundred times as much matter in the whole solid inch of the perfectly solid body; and surely it is not all lodged in one of the surfaces, or in any of them.

There is another hypothesis that must be maintained by those who assert this elastick fluid as the cause of gravity, which is itself very improbable, *viz.* that the perfectly solid parts of all bodies whatsoever, are of equal bigness: for in similar particles, the solidity is in a triplicate ratio of the homologous sides, and the surface only in a duplicate ratio of these. So that if similar solid particles are of a different bigness, the matter being in a triplicate, and the action of a fluid only in a duplicate ratio of the sides, the same quantity of matter will not have the same gravity. If two particles have their sides as 2 and 3, their gravities will be as 4 and 9, and yet their quantities of matter are as 8 and 27.

Dr. *Clarke* arguing against Mr. *Colins*, says, "This proportion it is that evidently shews gravitation not to be caused by material impulse. And unless you [Mr. *Colins*] could have found out an hypothesis, whereby either the quantity of solid matter in bodies, and the quantity of their superficies, could be made one and the same; or upon mechanical principles, bodies could, by superficial contact, receive impulses proportional to the quantity of solid matter contained in them; you would much more advantageously to your self, have acknowledged the first palpable error, than by a heap of things besides the purpose, have endeavoured to amuse only such readers as want skill in mathematics." This is in his fourth defence of an argument, to prove the immateriality of the soul, *&c.* p. 244. And in his third defence, p. 183. he says: "It has been demonstrated even mathematically, that gravitation cannot arise from the configuration and texture of the parts of matter, and from the *circumambient impelling bodies*; because, if it did, it would not be proportionable to the quantity of matter, or the solid content of all bodies, without any regard to their superficial proportion, as we find by experience it is; seeing all bodies, of all textures, and all configurations of parts, and all varieties of superficial proportion, (a bullet, or a feather, or a piece of leaf-gold, or a sheet of paper,) descend *in vacuo* with

it: ſo if this reſiſtance were not in matter, it would follow that then the ſame force, and that an infinitely little one, would move all quantities, or maſſes

" equal ſwiftneſs. And if material impulſe be *not* the cauſe of gravity; then ſome Being that is " not matter (for laws, or powers, are nothing but empty words) *muſt of neceſſity* be allowed to be " the cauſe of it." And the Doctor at this place refers (in the margin) to Sir *Iſ. Newton*'s *Princip.*, and the very queries at the end of his Optics, as confirming this reaſoning. And it muſt ſeem ſtrange if theſe queries both confirm and oppoſe it.

Again, if we ſuppoſe a cubical inch of gold receiving its impulſe of gravity from the particles of this fluid, how can we conceive thoſe particles that penetrate through the whole depth of the gold, in order to give that ſide of it neareſt the earth its impulſe of gravity, to pervade all the reſt of it without ſtriking againſt ſolid parts, and then at length to find ſolid parts at the undermoſt ſurface to impinge upon? All the gold is of one denſity ſure. Or ſuppoſe it were not; yet invert the gold, and turn the denſeſt ſide uppermoſt, and the difficulty becomes greater. Theſe impinging particles muſt paſs the denſeſt ſide, and find only ſolid parts to ſtrike againſt in the rarer.

As to what is ſaid, *that by reducing more phænomena to one principle, cauſe, or inſtrument, the beauty of nature is ſet in a greater luſtre*; it is certainly true: but I do not think any mechanic principle or ſecond cauſe, can (by the terms, or as being a ſecond cauſe) be ſo ſimple, or ſet nature in ſo great a luſtre, or ſhew the univerſality of Providence, or the immediate preſence of God ſo much, as to ſhew he himſelf is immediately concerned in all the operations of nature. Let what I have ſaid above, in this ſeventeenth paragraph, be remembered, *viz.* that we are but one ſtep removed from the immediate cauſation of the firſt cauſe, even by allowing the intervention of this elaſtic fluid, unleſs we would be openly abſurd, and make a ſeries of effects infinite. The firſt cauſe then muſt give the impulſe to every one of theſe elaſtic particles immediately: and therefore this ſuperinduced mechanical cauſe of gravity would be a multiplying of principles needleſsly. To ſuppoſe God moving one thing, and that thing another, *&c.* for a long train, ſaves the Deity no pains, (if I may ſpeak ſo) and is more unphiloſophical; only it agrees better with our weakneſs, and therefore with our prejudices, who are forced to help ourſelves by the natural powers of matter (as we call them.) *But what needs God help himſelf by his own powers? And they are originally his powers, unleſs we would incur direct atheiſm.* We want power, and therefore diſplay all our art to help our ſelves the beſt way we can: hence we think it is art in an infinitely powerful being to do as we do, though there is no parity. The wiſdom of God diſcovers itſelf a thouſand other ways: but ſince it is a contradiction that motive power ſhould be lodged in matter, philoſophy will not allow us to ſeek a compend here.

Sir *Iſaac Newton*'s own account of this fluid is as follows. In the advertiſement to the ſecond edition of his Optics, he tells us, *that at the end of the third book in that edition, he had added ſome queſtions; and to ſhew that he did not take gravity for an eſſential property of bodies, he had added one queſtion concerning its cauſe, chuſing to propoſe it by way of a queſtion, becauſe he was not yet ſatisfied about it for want of experiments.* The queſtion itſelf is the 21ſt in number, and in the following words. " Is not this medium much rather within the denſe bodies of the ſun, ſtars, planets " and comets, than in the empty celeſtial ſpaces between them? And in paſſing from them to " great diſtances, doth it not grow denſer and denſer perpetually, and thereby cauſe the gravity

maſſes of matter, how unequal ſoever, with equal facility; and that it would be equally eaſy to give the ſame degree of celerity to any body:

or

" of thoſe great bodies towards one another, and of their parts towards the bodies; every body " endeavouring to go from the denſer parts of the medium towards the rarer? For if this me- " dium be rarer within the ſun's body than at its ſurface, and rarer there than at the hundredth " part of an inch from its body, and rarer there than at the fiftieth part of an inch from its bo- " dy, and rarer there than at the orb of Saturn; I ſee no reaſon why the increaſe of denſity " ſhould ſtop any where, and not rather be continued through all diſtances from the ſun to Saturn, " and beyond. And though this increaſe of denſity may at great diſtances be exceeding ſlow, yet " if the elaſtic force of this medium is exceeding great, it may ſuffice to impel bodies with all " that power which we call gravity. And that the elaſtic force of this medium is exceeding " great, may be gathered from the ſwiftneſs of its vibrations. Sounds move about 1140 *Engliſh* " feet in a ſecond minute of time, and in ſeven or eight minutes of time they move about one " hundred *Engliſh* miles. Light moves from the ſun to us in about ſeven or eight minutes of " time, which diſtance is about 70000000 *Engliſh* miles, *&c.*"

Here, with that great deference which becomes me, let me be forgiven if I offer the reaſons why this account of this elaſtic medium ſeems to me not to anſwer the appearances of gravity. And firſt, if it is much denſer without the bodies of the planets than within them, or much rarer within theſe denſe bodies than without them, it will be much rarer within and on the ſurface of the earth (a planet) than at a diſtance, and therefore much rarer within denſe bodies which lie within or on the ſurface of it, (minerals and metals for inſtance) than without them: whence it would appear they ſhould gravitate more according to their ſurfaces than their internal ſolidity, and the parts of the earth (ſolid rocks and the heavier ſtrata) ſhould not gravitate to the earth itſelf according to their quantity of matter. So that this account doth not ſeem to anſwer for the different ſpecific gravities of different bodies lying in the ſame depth, ſince in theſe, however different, it ſeems to be ſuppoſed equally rare, the denſity of it not being accommodated to the different denſities of bodies, but to different diſtances. Beſides thoſe great bodies themſelves, the ſun, planets, comets, ought to be impelled to each other according to their quantity of matter, which cannot happen, if this elaſtic medium acts more forcibly on their *ſurfaces* than *internally*, as it muſt do, I think, on this ſuppoſition. Farther, if this medium grows always denſer the greater the diſtance is from the ſurface of a planet; a body let fall at the diſtance of 60 ſemidiameters of the earth from its ſurface, or at the diſtance of the moon, would move faſter in the beginning of its deſcent, than when let fall at one ſemidiater's diſtance only; unleſs we would ſay that the denſer an elaſtic medium is, it acts with the leſs force, the contrary of which is true. But a body let fall here moves about 16 feet in a ſecond, and at 60 diameters diſtance it would move but about ſixteen feet in 60 ſeconds: for the ſpaces run over increaſe as the ſquares of the times, and decreaſe as the ſquares of the diſtances, ſo that in this caſe they would be the ſame. (See Dr. *P.*'s Rev. of Sir *If. Newton*'s Philoſophy, *b.* 2. *ch.* 3. N° 4. and again *ch.* 5. N° 3.

Moreover, an elaſtic medium that conſiſted of particles which repel each other, like our air; for Sir *If. Newton* ſays a little below, " And ſo if any one ſhould ſuppoſe that Æther, like our " air, may contain particles which endeavour to recede from one another (for I do not know " what this Æther is) and that its particles are exceedingly ſmaller than thoſe of air, or even than

or rather that no force at all would perform this. For where no reſiſtance is, no force needs be beſtowed to overcome it. A ſmaller or a greater maſs of

" thoſe of light: the exceeding ſmallneſs of its particles may contribute to the greatneſs of the " force by which thoſe particles may recede from one another, and thereby make that medium " exceedingly more rare and elaſtic than air;" I ſay, an elaſtic medium that conſiſted of particles which repel each other, like our air, would reſemble our air alſo in another particular, which, I humbly think, would overturn this whole hypotheſis: for the particles of ſuch a medium, endued with this repulſive force, ſhould, like thoſe of air, repel each other the more ſtrongly the nearer they were to each other, that is, the denſer the medium were in any part: and there being leſs reſiſtance towards the ſide where it was rarer, they would recede to that ſide, till their forces were *in equilibrio*, and the whole maſs of this medium became of an equal denſity. In which caſe, their elaſticities balancing each other, the particles would reſt, and produce no effect upon any denſe body either without or within its ſurface. This is the very caſe of our air, whoſe elaſtic, repelling particles could never, I think, be ſuppoſed the cauſe of bodies being impelled to each other in it.

Farther, let me anticipate, in ſome meaſure, here, an argument I ſhall inſiſt upon below. The action of this fluid is ſuppoſed the cauſe why the parts of theſe great bodies, the ſun, planets, comets, gravitate to the bodies themſelves (ſee the Queſtion cited) *that is*, gravitate towards one another; or it is ſuppoſed to act within the ſolidity of theſe bodies. Now there is ſuch an affinity between the mutual attraction of the internal parts of great bodies (as the earth) and the internal parts of ſmall bodies (as a ſtone, gold, *&c.*) while they lie in the ſtrata: that is, between the attraction of gravitation and the attraction of coheſion, that if it is abſurd to offer at a mechanical ſolution of the one, it ſeems no leſs abſurd to offer to ſolve the other mechanically. Why might we not ſuppoſe that the action of this fluid impels the internal parts of marble to one another, as it doth the internal parts of the earth? Is there a different cauſe of coheſion, when the marble lies in the ſtratum in the bowels of the earth, and when it is brought up to the ſurface? All the arguments that ever were offered to account for the attraction of coheſion mechanically, confute themſelves. In the inſtance juſt now aſſigned of marble, the two attractions coincide. The diſtinction between them, in this caſe, ſeems but nominal. If an immaterial impulſe is neceſſary in the one, is it not in the other? And, finally, if ſo, is not this hypotheſis an inartificial multiplying of principles?

Again, if light is darted in all directions indifferently from any luminous body (the ſun particularly) and reflected to any ſide from ſpecula and all opaque bodies; and if ſound is propagated *quaquaverſum*, by the vibrations of this medium; it ſeems hard to conceive that the vibrations of the ſame medium that puſh light from the ſun, ſhould puſh the planets, *&c.* to the ſun? Or do the contrary vibrations encounter one another? They are ſtrong one way, in impelling the earth to the ſun's ſurface; and yet they ſeem no leſs ſtrong the contrary way in impelling heavy bodies to the earth's ſurface which is neareſt the ſun. It is to be obſerved with reſpect to theſe contrary vibrations, that they muſt as much ſhatter, confound and hinder one another, when the medium is ſuppoſed the ſame, as if they were the contrary vibrations of two different mediums. Thus Sir *Iſ. Newton* himſelf reaſons, ſpeaking of a ſuppoſition of Mr. *Huygen*'s, (Queſt. 28) " And it is

5 " as

of matter could make no difference of reſiſtance, in that ſuppoſition, where matter univerſally was endued with no power to reſiſt: nor could the

" as difficult to explain by theſe hypotheſes, how rays can be alternately in fits of eaſy reflexion " and eaſy tranſmiſſion; unleſs perhaps one might ſuppoſe that there are in all ſpace two Æthereal " vibrating mediums, and that the vibrations of the one of them conſtitute light, and the vibra- " tions of the other are ſwifter, and as oft as they overtake the vibrations of the firſt, they put " them into thoſe fits. But how two Æthers can be diffuſed through all ſpace, one of which acts " upon the other, and by conſequence is re-acted upon, without retarding, ſhattering, diſperſing " and confounding one another's motions, is inconceivable." If then it is inconceivable that the action of this medium ſhould not be retarded, ſhattered, *&c.* by the re-action or reſiſtance of another medium, though both ſo rare and unreſiſting, as not to impede the motions of the ce- leſtial bodies; is it leſs inconceivable that its action ſhould not be retarded, ſhattered, *&c.* before it reaches the heart of marble, braſs, adamant?

As to what Sir *Iſ. Newton* ſays in the laſt part cited from Queſt. 21. That the littleneſs of the repelling particles may contribute to the greatneſs of their repulſive force. This is a direct impoſ- ſibility, unleſs he aſcribes this repulſive force to an immediate immaterial power exerted, and not to the particles themſelves; which argument I ſhall inſiſt upon, when I come to ſpeak of the re- pulſive force of the particles of air, and of the coheſion of the leaſt parts of matter; for other- wiſe, it is as if we ſhould ſay, The leſs the adequate cauſe is (a repelling particle, to wit) the greater the effect may be (namely, the force exerted by it). The leſs a material particle is, the leſs power it muſt have, ſecluding all other agency; and that can never produce the greater effect: nay (I repeat it) it muſt be an immaterial agent; for the mechanic action of other matter could never be greater on a particle the ſmaller it were. And what he ſays here, he repeats elſewhere on another ſubject, (*Opticks*, p. 370. edit. 3d.) " Now the ſmalleſt particles of matter (ſays he) " may cohere by the ſtrongeſt attractions, and compoſe bigger particles of weaker virtue; and " many of theſe may cohere and compoſe bigger particles whoſe virtue is ſtill weaker, *&c.*" Now it is impoſſible the very ſmalleſt particles ſhould attract each other with ſuch prodigious force as not to be overcome by any ſecond cauſe (for this will appear true) unleſs an external power im- pelled them to each other inceſſantly. Let there be two particles A and B, and it is altogether ad- mirable that I can overcome the joint reſiſtance of them both, any way I pleaſe, and yet cannot overcome the ſeparate reſiſtance of any one of them, ſo as to make it leave the other.

The words of this great man are ſtill farther urged by others, in defence of a mechanical gra- vitation; *viz.* " That the *magnet* acts upon *iron* through all denſe bodies not magnetic nor red- " hot, *without any diminution of its virtue*; as for inſtance, through *gold*, *ſilver*, *lead*, *glaſs*, *wa-* " *ter*. The gravitating power of the ſun is tranſmitted through the vaſt bodies of the planets, " without any diminution, ſo as to act upon all their parts to their very centers, with the ſame " force, and according to the ſame laws, *as if the part upon which it acts were not ſurrounded* " *with the body of the planets.*" [Optics, p. 242.] And again: " If any one would aſk how a " medium can be ſo rare; let him tell me how the air, in the upper parts of the atmoſphere, " can be above 1000000000 times rarer than gold. Let him alſo tell me, how an electric body " can by friction emit an exhalation ſo rare and ſubtile, and yet ſo potent, as by its emiſſion-

" to

the difference of velocities occasion any difference in a thing, which is equally denied concerning all velocities. The whole terraqueous globe would

" to cause no sensible diminution of the weight of the electric body, and to be expanded through " a sphere, whose diameter is above two feet, and yet to be able to agitate and carry up leaf " copper, or leaf-gold, at the distance of above a foot from the electric body? And how the " effluvia of a magnet can be so rare and subtile, as to pass through a plate of glass without any " resistance or diminution of their force, and yet so potent as to turn a magnetic needle beyond " the glass." [Opt. p. 327]

As to the first of these instances; *gold* is a denser body than *iron*; and that the particles of matter from a *magnet* should pass *freely*, and *without impinging* on the denser body, and then *impinge on*, and *impell* the parts of the rarer body, if there were no other thing than material impulse in the case, is itself impossible and contradictory. These particles are but dead matter, and can only receive an impulse in one direction; and yet they are supposed here to pass without hindrance or let, through a *denser* body, and seize upon a *rarer* body beyond that: If this is so, I am sure it is not an effect merely mechanical, or performed without the intervention of a superior cause. What should direct them in their passage through the *denser* of the two bodies, *freely*, or without striking against the parts of it, (for it is said, *there is no diminution of their power*;) that they may *impell*, and *act upon* the parts of the less dense? For every one sees that, according to merely mechanical action, they should impinge most on the densest body; especially since it is nearest, and since their power must decrease as the squares of the distances from the magnet increase. To alledge *attraction* here, is to alledge *immaterial power* exerted; since *matter cannot act where it is not*. And if, on any hypothesis, an immaterial cause must intervene; it will be needless to urge this instance in defence of a gravitating fluid supposed to be mechanical.

The instance *of the sun's gravitating power being transmitted to the very centers of the planets*, is the instance in debate, and cannot therefore be well urged to prove itself. It is contended that this gravitation is not the power of the sun. The sun, like every other body, can have no other power but a *vis inertiæ*. And when it is asserted, *that this power acts upon the very centers of the planets, as if the part on which it acts were not surrounded with the dense body of the planet*; this is to own, I think, that this cannot be the action of matter upon matter; but rather the action of an immaterial cause upon it.

As to what is said *of a medium being so rare*, &c. there is no doubt a medium may be rare in any assignable proportion with respect to a given body, as gold: but a medium which impels bodies according to their quantity of solid matter, must be as dense as the very densest body it impels, that every particle in the body may receive its impulse from the particles of this medium. And it avails nothing to contrive hypotheses concerning the various possible density, or rarity, of bodies, or of this medium; since, if the density of this medium and of the heaviest body, must be the same, or equal, the difficulty still remains. Such a medium would as much resist the motion of bodies, as if there were a *plenum* of the very densest body; gold for instance.

As to the third instance of effluvia issuing from electrical bodies upon friction, and bringing up, or repelling leaf-gold or other light bodies at the distance of above a foot; I ask whether this can be

would then make no greater resistance to the moving force, than a hand ball now doth: nay not an infinitely little part of that resistance. A moving body could lose nothing of its *moment* (if *moment* were possible on this supposition) by carrying any obvious body along with it (*l*). These are consequences equally (and flagrantly) contrary to reason and experience.

XIX. So likewise any assignable body, moving with any possible celerity, would be stopped, and the whole motion quite extinguished, by any the least resistance possible; or rather this would be done by no force at all (*m*): for having no force to continue its motion, there should be nothing

be supposed to be done, without *attraction* or *repulse*? And that is, Whether it can be supposed without immaterial power exerted? That matter should *attract* or *repell* other matter, or act any way but by *immediate contact*, and because of its *vis inertiæ*, is directly impossible. Therefore adducing such instances to support a mechanical cause of gravity, is contending that one effect may be *mechanical*, because another is *not mechanical*.

(*l*) Mr. *Herman* hath a paragraph in the *Prænotanda* to his *Phoronomia*, the whole of which I beg leave to cite, both as it confirms what is here said, and nearly coincides with that description of the resistance of matter given above, N° 9. It is his 11th: *Sed inest etiam corporibus vis quædam passiva, ex quâ nullus motus, nec tendentia ad motum resultat; sed consistit in renixu illo, quo cuilibet vi externæ mutationem status, id est motûs vel quietis, corporibus inducere conanti reluctatur. Quæ resistentiæ vis, significantissimo vocabulo, à summo Astronomo* Joh. Keplero *vis inertiæ dicta est. Hæc vis inertiæ in corporibus quiescentibus, se satis prodit; etenim corpus quodcunque* A *in aliud, sed quiescens,* B *impactum aliquid de suâ vi & motu amittet, excipiensque* B *aliquid virium & motûs ab impellente* A *acquiret. Ex quo claret, quiescens corpus* B *reapse vim aliquam passivam habere, à* vi *in id incurrentis corporis* A *frangendam atque superandam; alioqui impellens* A *post occursum nihil de suo motu amisisse debuisset, cùm corpus quiescens* B, *si resistendi facultate careret, alterius motui nullam remoram afferre possit, adeò ut ambo, impellens* A *& impulsum* B, *eâ ipsâ celeritate, quâ corpus* A *ante occursum ferebatur, etiam post impactum incedere deberet, quod phænomenis adversari nemo non videt.* The same argument will shew the *vis inertiæ* also, as easily, in moving bodies. For if A be supposed to come up on B moving in the same direction, but more slowly, the first will lose, and the last gain some velocity; just as in the former case. And generally, there is no instance of the action of bodies upon bodies, where it doth not appear, if we reason rightly; since all such action proceeds from it, as is shewn N° 10, and fully explained in the next paragragh.

(*m*) Dr. *Keil* expresseth the case both of this and the last paragraph, in the place cited above at the note (*d*) clearly. *Quidam sunt philosophi, qui corpus ex suâ naturâ tam ad motum quàm ad quietem indifferens esse supponunt; at per indifferentiam illam non (ut opinor) intelligunt talem in corporibus dispositionem, per quam quieti aut motui nihil omnino resistunt; quippe, hoc posito, sequeretur corpus quodvis maximum summâ celeritate motum, à minimâ quâvis vi posse sisti; aut si quiesceret magnum illud corpus, ab alio quovis minimo propelli, absque ullo velocitatis corporis impellentis decre-*

mento.

thing to be overcome, or no contrary force would be necessary. Let a man reflect a little in his own mind on the nature of such a consequence as this. Hence it is palpable that the force of moving bodies to act on other bodies, or what is called *moment* in them, proceeds solely from their resistance to a change of their state. Or, it is their primitive resistance multiplied by their celerity; or the force necessarily impressed on them to overcome this their resistance, and equal to it, and which they retain. This will be plain by an example. The force necessary to be impressed on the body A, to make it move with the celerity C, overcomes its natural resistance once (so to say), or overcomes its resistance to be moved with this degree of celerity; which state it obstinately continues in, or retains the degree of force impressed. And the force necessary to be impressed upon it, to make it move with a degree of celerity more, or with 2 C, which is just as much as was impressed the first time, overcomes its natural resistance a second time; and this second impressed force it also retains, because of its inactivity to destroy, or lay it down. And just so, it retains the third force impressed, equal to any of the former, and necessary to overcome its equal resistance to be moved with a third degree of velocity, or with three times C altogether. And so on. Therefore the whole resistance now will be the three forces impressed, equal to the three different resistances made: so that, as was said, the *moment* is equal to the primitive or first resistance multiplied by the celerity, or to the force impressed to overcome that resistance (*n*). Nor is there any thing more absurd than that any number of degrees

mento; hoc est, corpus exiguum quodvis in aliud maximum impingens, possit illud secum abripere, sine ullâ ipsius retardatione; & utrumque corpus post impulsum junctim ferrentur eâ celeritate, quam prius illud corpus exiguum habebat, quod absurdum esse omnes novimus. Non igitur indifferentia illa sita est in non renitentiâ ad motum ex statu quietis; aut ad quietem ex statu motûs, sed in eo solùm, quod corpus ex suâ naturâ non magis ad motum quam ad quietem propendeat, nec magis resistit transire à statu quietis ad motum, quàm à motu rursus ad eandem quietem redire.

(n) Here it hath been suggested, "That what I think so evident about the force of bodies "is disputed by *s'Gravesande, Bernouilli, &c.* who estimate it by the square of the velocity, "and not by the simple proportion of the velocity." To this I answer, that Mr. *Leibnitz*, and those who follow him in this particular, do not deny matter to be a resisting substance, more than others; and as long as this is allowed, the main conclusion stands, let that resistance be in what proportion it will. It would be of no service to a sceptical objector to allow the resistance of matter, and only quarrel about the proportion it is made in. But farther, I cannot help thinking still, that what is here said about the force of bodies is very evident to any one, even in the simple

degrees of celerity, abſtractly conſidered, or without reſiſtance, ſhould conſtitute *moment:* which yet the denying of what is here ſaid would infer.

ſimple coarſe way it is deduced in this paragraph: great men have ſhewn it in a better way, and demonſtrative form. All ſides, I think, grant that the reſiſtance any body, as A, makes to be moved, is the ſame with the reſiſtance it makes to be ſtopt again: but if that were as the ſquares of the velocities, the body A would make four times the reſiſtance to be moved with 2 C, as it doth to be moved with 1 C; and nine times that reſiſtance to be moved with 3 C: 16 times that reſiſtance to be moved with 4 C, *&c.* But this is extremely abſurd; for, from the ſame reaſon that A reſiſts any change of its ſtate of motion (or reſt) at all, it reſiſts equal changes equally: and, as I have ſaid in this N° 19, A moving with 1 C, is as much at reſt with reſpect to A moving with 2 C, as A moving with 0 C is to A moving with 1 C; or the changes from reſt to motion are equal: and therefore contrarily, from motion to reſt.

Beſides, it is a ſtanding theorem in mechanics, *that the ſtate of the center of gravity, reſting, or moving uniformly forward, it not changed from the action of bodies among themſelves, or their ſhock on each other.* Nor is it leſs evident that 2 A moving with the celerity C, hath twice the force of once A moving with the ſame celerity. Now ſuppoſing A moving with the celerity 2 C, to encounter directly 2 A moving with once C, the center of gravity reſts before the ſhock: but ſince (on this ſuppoſition) the contrary moments are as 4 and 2, the center of gravity and the bodies will move after the ſhock. Which, I think, would confound the laws of the congreſs of bodies, both elaſtic and unelaſtic.

Moreover, it is impoſſible the forces of bodies falling by gravity can be in the proportion of the ſquares of the velocities. Such a motion is uniformly accelerated, as Mr. *Wolfius* owns and demonſtrates, *Theor.* 14. *Element. Mechanicæ*; or ſuch as receives equal increments of velocity in equal times, *Defin.* 15. *Element. Mechan.* Therefore the increments of velocity, or the impulſes of gravity which cauſe them, muſt be unequal in equal ſpaces of their deſcent, the fewer always the farther they have deſcended; for, the velocity always increaſing, the equal ſpaces are run over in ſhorter times. The forces therefore cannot be as the ſpaces fallen through (which are in the ſame proportion as the ſquares of the velocities) unleſs the bodies received an equal number of impulſes in equal portions of theſe ſpaces. In four times any ſpace the body receives but twice the number of impulſes as in once that ſpace, becauſe but twice the time is ſpent in the fall; in nine times that ſpace, but three times the number of impulſes, *&c.* In this caſe then, they who follow Mr. *Leibnitz*'s hypotheſis, will be preſſed with abſurdities, ſay what they can; for either the body receives four times the number of impulſes in twice the time, nine times that number in thrice that time; and ſo on, increaſing in the ratio of the ſquares; which is monſtrous, and could never produce a motion uniformly accelerated: or if the impulſes are but ſimply as the times, then twice the number of impulſes impreſſes four times the force on the body, thrice that number nine times that force, and ſo on in the ratio of the ſquares again; which is as monſtrous an abſurdity on the other ſide, and directly oppoſite to that ſhewn above, where the body made four times the reſiſtance to be moved with twice the velocity; and here it requires but twice the number of impulſes to receive four times the force.

Better judges than I have obſerved that Mr. *Wolfius*, in endeavouring to demonſtrate that the forces of falling bodies are as the ſquares of the velocities, applies in the proof a propoſition which has nothing to do with deſcending bodies; and that *Bernoulli* in his demonſtration (*ibidem*) ſuppoſes the compounded force equal to the ſum of both the compounding forces, or confounds *mechanical compoſition* and *reſolution* of forces with *arithmetical addition* and *ſubſtraction* of them.

Calling the *moment* M, and the resistance R; it will be 3 C R=M, and not 3 C=M. And since, from the reasoning in N° 4. it is also 3 C A=M, it follows that 3 C R=3 C A, or R=A. That is (if matter resist at all) every part of the body A resists; or there is no unresisting matter in it. Besides, we may be satisfied that the body will resist the equal changes equally; since A moving with the velocity 1 C, is at rest as much with respect to A moving with the velocity 2 C, as A moving with the velocity 0 C, or resting, is with respect to A moving with the velocity 1 C; or their relative velocities are equal. If we conceive two men riding, the one after the other, and equally fast, they are relatively at rest, as if they were both standing still (*o*); since the distance between them is always the same. It is the same thing as if they were both carried in a ship with that celerity, and the same distance between them.

XX. Therefore, if we would at any time silence all our doubts about the inactivity of matter, and be practically convinced of its resistance to all change of its state, we need only call to mind *that force, or moment, in it to act on other matter, is only the sum of all the forces impressed upon it* ab extra (that is by some immaterial Being, N° 14 and 15) *to overcome its resistance to motion; and retained by it, because of its farther resistance to change the state it is thus put into.* And hence, as was asserted N° 16. since matter moving by *gravity, attraction, elasticity, repulse*, hath moment or force, it is a plain case *it is resisting matter in these motions*; and that it is impelled in them, by something without itself, or *not matter*; and that the moment here, as elsewhere, is but the aggregate of all these external impulses impressed upon it to overcome its resistance to be moved with such a degree of celerity, and conserved in it, because of its constant farther resistance to suffer any change of that present state; and that, unless matter thus resisted a change of its state, and were impelled by some force *ab extra* to change it, no body would be heavy; and elasticity or repulsion would be without effect.

XXI. This also confirms what was said in N° 10, that unless matter resisted a change of state, *the action of matter upon matter would be inconceivable, or rather impossible.* For there could have been no action where

(*o*) *Xenophon* long since observed this: Καὶ γὰρ ἴσαν ἀμφότερα ταχέα ἦ, ὅμως δὲ πλησίον γίγνεσθαι ἀλλήλων, ὥσπερ τὰ ἰσχνότατα ἕστω. *Cyropæd.*

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there was no moment, or force, to act; and there could have been no moment where there was no reſiſtance; ſince (to repeat it once again) from N° 19. it appears *that the moment of bodies is only their primitive reſiſtance to a change of their ſtate multiplied by their celerity; or the force equal to that reſiſtance, neceſſarily impreſſed on them to overcome it, and retained by them.* Let us ſay then what would have been the reſult, if a body in motion had come upon other bodies at reſt, and ſee if any conſiſtent effect could have been produced. Either it muſt have been ſtopped on coming to contact with the ſmalleſt atom, ſince it had no force to carry that along with it; and thus all the bodies in the univerſe, upon coming to contact, would have remained one motionleſs, torpid lump; or elſe, ſince other bodies had no power to reſiſt, although it had no power to impel them, they muſt have all hurried on, through the immenſity of ſpace, in one uniform direction for ever. Thus it appears no conſiſtent effect could have been produced; nothing that is intelligible or poſſible; and that the tendency in body not to change its ſtate, not to be active, is yet the reaſon why body acts on body, as was aſſerted in N° 10. and that without this ſtubborn inactivity, the material world, this great ſyſtem of viſible things, would have been ſomething inconceivable and impoſſible; ſince motion in it could have had no poſſible effect. From this we might be led to ſee that matter muſt reſiſt a change of its ſtate of reſt or motion, as it is a ſolid extended ſubſtance: but firſt let us ſtop a little, to ſee how far we have brought the controverſy with the Atheiſt.

XXII. By what is ſaid it appears that his ſinking cauſe is already reduced to a miſerable dilemma, on either ſide of which it muſt inevitably periſh. For either matter is *reſiſting matter*; or it is not. If it is reſiſting matter, it could never move itſelf, by what is ſaid in N° 14 and 15; ſince two conatus's mutually deſtructive of each other could never be planted in it; and if it is *unreſiſting matter*, it could never move other matter, by what has juſt now been ſaid N° 21. unleſs that other matter could be moved by nothing at all; and this though we ſhould ſuppoſe it ſome way or other firſt moved itſelf. So that in either caſe matter can never become a ſelf-moving ſubſtance; *no not by any power*, becauſe it implies a contradiction; for unreſiſting matter could no more move the matter of a plant, animal, or of the human body, than reſiſting matter could. This deſerves our notice. There is no leſs need of an immaterial Mover on the one ſuppoſition than the other; nor could ſuch matter have been of any imaginable uſe in the

material world. Unreſiſting matter is a yet more diſadvantageous ſuppoſition to the Atheiſt, if poſſible, than reſiſting matter is. Nothing could have been effected by it. *Lucretius* could never have patched up his wretched univerſe out of ſuch ſtuff. He is forced to ſuppoſe gravity natural to matter; that is, by N° 16. he ſuppoſes it reſiſting matter; and therefore ſuch as wants an immaterial mover. He ſuppoſes his matter eternal; which in the laſt ſection of theſe papers it ſhall be ſhewn not to be. He gives it a power of changing the direction of its motion; which as has been ſhewn in N° 11. of this, it has not. And, laſtly, he makes his atoms infrangible to all power, which, as ſhall be ſhewn, they are not. If theſe four things had been denied him, he would have been forced to introduce an univerſal non-exiſtence; for his caſual world without theſe returns to nothing. In the ſuppoſition of reſiſting matter, motion might be in ſome degree communicated by one body to another, becauſe of the reſiſtance; but in the ſuppoſition of unreſiſting matter, every body that is moved, muſt want an immaterial mover, becauſe of the want of *moment* in one part of matter to act on another part of matter. In ſhort, I believe there is no man but is already convinced in his heart of the neceſſity of matter's being a ſubſtance reſiſting all change of ſtate in itſelf; and of the impoſſibility that ever matter can become, by any power, *a living, ſelf-moving being.* Who could have thought that mere paſſivity, and want of power in a ſubſtance, ſhould have been ſo uſeful, ſo neceſſary in the univerſe! But this always happens when we offer to mend the works of infinite wiſdom; we fall into nothing but downright contradiction (*p*). After this reaſoning

(*p*) With reſpect to the reaſoning in this paragraph, it is obvious, I think, that what is concluded of matter in general, muſt be true of any particular part of it: for what agrees to all poſſible parts, will agree to any one which a ſceptic might pitch on to argue from. However, I take notice of this, becauſe it hath been obſerved, *That my adverſaries will not readily adopt a ſyſtem of unreſiſting matter; but rather a ſyſtem of reſiſting unactive matter, actuated by ſome ſmall part, endued with particular powers and faculties, and particularly with a ſelf-motive power.* And again, *That ſome may pretend, that matter may have been ſo made, as to have its inertia with a particular exception, or reſtriction, or that matter might have had its inertia with the exception of gravity.* In caſe of ſuch an objection, it is replied, that all that hath been ſaid from the beginning of the ſection is applicable to, and therefore may be underſtood to have been ſaid concerning this ſmall part, ſuppoſed to be endued with particular powers and faculties above the reſt: and it muſt conclude againſt that part, how ſmall ſoever, if it concludes at all concerning any part. As to this ſmall part, I would ask, if it is matter at all? and then, if it is *reſiſting* or *unreſiſting* matter? If it is not matter at all, we have nothing to do with it: if it is matter, it muſt either reſiſt or not reſiſt. It is here ſuppoſed reſiſting matter, and ſuch as acts

ing here, *let me deſire the reader to reflect a little* on Mr. *Locke*'s property of ſpontaneous motion ſuperadded to matter, and conſider how the poſſibility of that hypotheſis ſtands now; but it is enough to have mentioned this here, ſince it will come in afterward.

XXIII. We ſhall conclude the neceſſity of the *reſiſtance* of matter with greater evidence, ſee the connexion it hath with ſolidity itſelf, and there-

acts on other matter; and that is, by all that hath been ſaid before, matter utterly incapable of being endued with a ſelf-motive power. If it is unreſiſting matter, the ſuppoſing its reſiſtance to motion taken away, makes it equally impoſſible that ever it ſhould move any thing elſe. The ſceptic is at full liberty to try to make a *mover* out of *unreſiſting matter*; and therefore out of matter in any ſhape he can put it in. Beſides that the ſuppoſition of unreſiſting matter will immediately appear contradictory. As to the other faculties and powers mentioned (among which perhaps is meant Mr. *Locke*'s thought and volition) it is too ſoon to come to theſe yet.

And now with what reſtriction or exception has matter got its *inertia?* If the reſiſtance of it were but the hundredth or the thouſandth part of what it is, the argument is ſtill as demonſtrative as if it were a hundred or a thouſand times greater than it is. And when it is ſuppoſed to have none at all, the whole difficulty ſtarts up undiminiſhed in a new form.

I ſhall here obviate another evaſion, which hath not yet been ſuggeſted, only becauſe it is poſſible it may be, *viz. That unreſiſting matter doth not act by material impulſe, contact, or preſſure, as reſting matter doth, but by ſome other virtue or efficacy.* If this ſhould be ſaid, it is anſwered, that all matter is confined within a terminating ſurface, or ſurfaces, beyond which it doth not exiſt, and therefore beyond which it doth not, *cannot* act. Nothing can act where it is not. This is one of the plaineſt, moſt unexceptionable principles. To ſay a thing acts, and yet is not where it acts, is to ſay nothing acts there. Where a thing is not, nothing at all is, no cauſe at all with reſpect to that thing; and if it were not for ſomething elſe, no action or effect could be there produced. This lets us ſee that a *ſphere of activity* taken in this ſenſe, though it may be a learned word, is a real contradiction. Spheres of activity ſuppoſe either material action, or immaterial power exerted; or they are nothing but empty ſound. Unreſiſting matter could not indeed act by *preſſure*; it ſhall be ſhown immediately, or rather it is ſelf-evident, that upon *preſſure*, nay upon the *approach to preſſure*, it ought to ſhrink up, and be annihilated. It is not ſo much as capable of contact. It is the ſame as unſubſtantial matter: the ſhadow, the name of matter only. Now this unſubſtantial phantom, ſince it is incapable of contact, muſt, if it act upon other matter, act where it is not; that is, *not act* there: for, as I have ſaid, matter cannot act beyond itſelf, or without its terminating ſurface. But perhaps a power, virtue, efficacy, faculty, (or what ſhall we call it?) gets once without the terminating ſurface, and entring the other reſiſting matter, overcomes its reſiſtance. But in the tranſition from the one to the other, what is the *ſubject* of this *migrating power* or virtue? Power without a ſubject of inheſion is but the name of power. It could as well act where it is not, as the power of it act where it is not itſelf. Obſerve; the other reſiſting matter is incapable of receiving this tranſitive faculty to be lodged in it, as hath been ſhewn (N° 14, 15.) Therefore ſuch faculty ſhould ſtand without doors, when it came, though we ſhould ſuppoſe it capable of travelling ſo far alone.

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fore be more familiarly convinced of it, if we observe what use it is of both in our own and other animal bodies, in one particular respect, *viz.* that of *progressive motion*; and from thence infer with respect to other motions both in animate and inanimate bodies. Though our bodies did not at all gravitate to the earth, nor were supported by it, as a *solum*, or *sustentacle*, yet the resistance it affords would be still absolutely necessary to our *progressive motion*. Every step we make, we push the earth from behind us, with our hindmost foot, to wit, and the resistance it makes, since action and re-action are equal, gives us our propensity, and drives us forward: whereas if it were unresisting matter, we should never be able to move, or even to creep, from one place to another. For either the earth would yield from our foot pushing, without communicating any action or force to it, and leave us disappointed of our aim, so that the foot and the part it touched should never be able to separate; or upon giving the stroke, they would mix, and penetrate into one *anothers dimensions*, and lose their extension; that is really, be reduced (in part) to nothing. *Borelli*, in the chapter *De gressu bipedum*, explains very naturally this whole appearance. ——*Præterea* (says he) *dum innititur* [*homo*] *super duos pedes, fit motus promotionis centri gravitatis ejus, quatenùs uno conto cruris postici elongati per extensionem pedis, impulso pavimento retrorsùm, erigitur machina universa perpendiculariter super anticum alterum pedem firmum, & parùm anteriùs impellitur, & sic motu transversali promovetur. Posteà subitò pes posticus elongatus à terrâ suspenditur, flexis tribus articulis coxendicis, genu, & pedis extremi, à propriis musculis, qui minus quartâ parte ponderis humani corporis sustendunt; & ab impetu concepto à præcedenti impulsu, & à flexione capitis & pectoris, ultra situm pedis firmi solo figitur. Quo facto secunda statio celebratur, & posteà, eâdem periodo, pes posticus operando gressum continuat* (*q*.) We could not so much *as creep*, I say, upon this supposition, from one place to another; for if we went on all four, as the quadrupeds do, there is manifestly a *pushing*, and *resistance*, to advance the center of gravity of the body, in that case as in the former. Or if we successively thrust forward our head, and the fore parts of our bodies, and dragged up the feet and hind parts of them, as multipedous insects and worms do; be-

(*q*) *De motu animal. part.* 2. *prop.* 158. See also *prop.* 156. *Quomodo in ingressu moles humana corporis anterius promoveatur. Prop.* 164. *Modus quo fiat incessus hominum super glaciem. Prop.* 168. *Animalia sextipedia quomodo incedant: & prop.* 13. *part* 2. *Quo artificio mechanico lumbrici repere possint.* It is evident also from this reasoning, that fowls could not fly, nor fishes swim, if the air and water did not afford them resistance. See *prop.* 190 & 214. *part* 1.

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sides the former resistance between the earth and the matter of our bodies, this supposes a resistance between the parts of our bodies themselves. When the lumbricus thrusts forward the fore part of its body, it is by the resistance between it and the hind part. How could this be, if matter were unresisting matter? The parts counter-acting each other, must sink in, and penetrate into one another's dimensions; or else remain in that state, motionless, and without possibility of advancing. In that case, when we thrust forward our hand (if we could thrust it forward) to catch any thing fixed and prominent, to help to drag up the rest of the body, every thing must yield; and really, for want of being able to resist, be reduced into non-extension. It is because matter resists, that it can be made firmly to cohere, or is susceptible of *tension*, *pulsion*, *pressure*. No motion can be without some of these, either when it is begun, or when it is again stopped; nor therefore without the resistance of solid parts to solid parts.

XXIV. Moreover, supposing we were tied to no firm sustentacle, as the earth is, by the impulse of gravitation, but that a man were placed pendulous from any such great body; as progressive motion would be then without means or foundation in nature, so any motion of the parts of his body among themselves, would be equally impossible. To extend the arm, or leg, supposes the trunk, or the rest of the corporeal moles, a *firm sustentacle* to afford resistance, and make motion possible: whence could this proceed, if matter gave way to the least pressure, or rather to no pressure at all? So the moving of the finger supposes the hand, or arm; or the moving of the tongue to speak, supposes the jaws, neck and contiguous parts, *a firm sustentacle* to supply resistance and re-action. The same is to be conceived of every internal action in the animal œconomy; the motion of the *blood* and other *fluids*, the action of the *muscles*, of the *stomach*, *heart*, *guts*; in a word, every material action as material, and excluding the extraneous impulse of any immaterial agent, supposes re-action and resistance to make it conceiveable. I can as well conceive that the shadow of my hand could wield, and move the pen while I write, as that my hand could do it, if the parts of it had no resistance. Therefore, whatever principle or hypothesis takes away resistance and re-action from matter, destroys *action* itself, and, in effect, the nature of matter: for, as resistance supposes solidity; so contrarily, solidity supposes resistance; or, because the parts cannot yield to each other, therefore they must resist.

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This lets us ſee where reſiſtance is ultimately lodged, and whence only it can be derived; it ſprings from *ſolidity*, and traced backward is found ſeated there. And this way alſo we again ſee, that upon the ſuppoſition that matter did not reſiſt or re-act, that is, in effect, did not act, the organized body of an animal, or plant, (where there is a circulation of action and re-action, as well as of motion) would have been a thing impoſſible, as hath been obſerved before (N° 8 and 22.)

XXV. From what has been ſaid we may obſerve, how wiſely animal bodies are tied down to this great body of the earth, by the conſtant impulſe of gravitation; for ſince there could be no progreſſive motion without the reſiſtance and re-action of ſuch a firm ſuſtentacle, if by any cauſe or accident, a living creature were once detached from the earth, at whatever diſtance, it ſhould be fixed there, as in fetters, without being able to return, or move in any direction. And this muſt happen, on many neceſſary occaſions, both to man and beaſt. In running ſwiftly, in offering to leap, in making many neceſſary efforts, they would loſe their hold of the earth, fly from it, and at length remain ſuſpended, for want of ſomething to reſiſt their efforts to bring themſelves down again (if the diſtinction of down and up did not then evaniſh; which if it did, I omit to mark their influence it would have on the animal œconomy). The whole body might perhaps turn ſome way on its own center of gravity, by the ſtruggle of the limbs among themſelves, between which a reſiſtance and re-action would ſtill be given; but this would never advance the center of gravity itſelf, nor therefore the whole body, to any ſide, nor in any direction. They would every where be found hanging, like flies catched in a cobweb, miſerably ſtarved to death. For the evil would be without remedy. If one offered to pull down another, by any means, they would meet at their common center of gravity, and there both remain fixed. One man might raiſe an hundred, without any of them being brought to touch the earth again; if they were but an inch diſtance from it, they would ſtill be miſerable. With what fearful caution ſhould we then tread on the ground, ſo as not to meet with any rebound from it! How much are we indebted to the goodneſs and wiſdom of God, who hath cemented his works otherwiſe, and wrought our ſecurity by wonderful power! For there was no Epicurean neceſſity of the preſent conſtitution, but a great poſſibility of the contrary, even of this very caſe we are ſpeaking of; let us not then think it imaginary and impoſſible, for the contrary obtains not, but by the inceſſant

ſant action and power of this Being exerted, in producing a conſtant gravitation, as we ſee pretty clearly already, and ſhall ſee more fully hereafter. And then what goodneſs was it in our Creator, to make this our earth ſo maſſy and large (which is a diſpoſition the Atheiſt finds fault with, as ſhall be ſhewn afterwards) that there might be no ſenſible proportion between it, and thoſe creatures that were thus to move upon it; that it might not give way inſtead of reſiſting and re-acting, when *herds*, *armies*, *and elephants* want a firm obſtacle to puſh them forward in their progreſſive motion! If a living creature were to move on a maſs of matter nearly of its own bulk, there would be a mutual *yielding* and *rolling* between them; although they were impelled to each other by a conſtant gravitation. And this would be always inconvenient, as long as there were any ſenſible proportion between the *animal* and the *ſuſtentacle*. But as it is, though our earth is pendulous in the midſt of heaven, our action is exerted on it as againſt a *firm baſis*, becauſe of its bulk and maſſineſs.

XXVI. To return then to where we left off in N° 21, *viz.* to ſhew that matter as a ſolid ſubſtance muſt neceſſarily reſiſt all change of its ſtate of reſt or motion; it follows from the argument there mentioned, if it did not thus reſiſt, that then two contradictory propoſitions would both be true. For the leaſt atom in motion coming upon any quantity of matter at reſt, the whole terraqueous globe, *v. g. muſt neceſſarily carry that whole maſs along with it*, with the ſame celerity; becauſe it makes no reſiſtance to be put out of a ſtate of reſt; and yet *could not carry it along*, making no reſiſtance itſelf to continue in its own ſtate of motion, and therefore not acting; action being the effect of reſiſtance. Thus the ſame propoſition would be both true and falſe at once. Let us ſuppoſe again two equal bodies encountring each other directly, and with equal celerities; theſe meeting muſt ſtop each other, or penetrate into one another's dimenſions. One of theſe muſt certainly be granted. If the laſt, matter is an unextended ſubſtance, the *phantom* or *ſhadow* only of ſolidity: if it is ſaid they are ſtopped, here is a plain poſitive effect produced, by no action or cauſe; by nothing, which is a very expreſs contradiction. By ſuppoſition this is not the action of matter upon matter, there being no reſiſtance on either ſide; and there is nothing elſe to which the action can be aſcribed. Again, ſince action, preſſure and reſiſtance, are the ſame thing; and ſince matter, on this ſuppoſition, is incapable of action or reſiſtance, it is equally incapable of preſſure, as in N° 23 and 24, which ſurely is re-

sistance. So matter by simple pressure (or rather upon the approach of pressure) would shrink up and be contracted into less dimensions (*r*); and this still farther and farther. Thus such unresisting matter might be quite annihilated by pressure, or rather without it, because there is no resistance or repressure. That is, it might be annihilated by nothing; that is, it is not an impenetrable extended substance. Therefore I conclude that matter as a substance solidly extended must resist all change of its state of rest or motion; and that this resistance is as inseparable from it as solid extension is.

XXVII. Because the great hinge upon which all turns in the present subject, is the proving that a *vis inertiæ*, or resistance to a change of its present state of rest or motion is essential to matter; let me be permitted to give another very short and easy way of bringing out this conclusion, which is as follows. Matter resists either by its *internal constitution*, as it

(*r*) I shall endeavour to give an example to illustrate this shrinking up by pressure, because it is said, it seems, obscure. When a man leans on his stick, there is a mutual pressure upwards and downwards between all the contiguous parts of it, through the whole length of it, if it resists at all. Now if we suppose it not to resist, or if the resistance were not continued from the one end to the other by this mutual pressure, he would have no support: or if the two extremes made resistance, and the middle part none, that mid-part would shrink up till the two resisting parts met. This seems plain enough. I for my part cannot conceive, if it made no resistance at all, that it would either suffer pressure, or be of more use to him than the shadow of a staff. And it is the same thing in any case where motion is begun in a body, or stopt in one. The resistance in either case supposes a mutual pressure of all the parts contiguous to each other, through the whole solidity of the body. If matter therefore is denied to resist, it is made incapable to bear pressure, even though it were at rest, as in the case of the staff; or the solidity of it is taken away. For it is very observable, I think, that this resistance and pressure obtains even where there is no motion; as in a heavy body when it lies on the pavement; all the parts press mutually on each other, and therefore make a mutual resistance. And further, from such an instance as this it can be shewn, that this pressure is propagated through the whole terraqueous globe: for the parts of the pavement immediately in contact with the heavy body, press against and resist it; and the parts in contact with these press against and resist them; and so on, as long as there are any parts in contact with the parts pressed: for the pressure can never be against nothing at all; that is absurd: there would be then action without re-action: and if any parts could not resist, or bear pressure, these would shrink into nothing, and leave the resisting parts to meet. It is very much to be doubted whether there be any matter in the world but what suffers some kind of pressure or other, and therefore makes resistance. Even in the cohesion of matter, the parts are impelled to one another, and therefore resist by their impenetrability. Resistance therefore is not only made in the congress and shock of moving bodies, but, which is less attended to, in all bodies, and at all times, whether in rest or motion.

is a ſolid extended ſubſtance; or from the influence and operation of *ſomething external*. To begin with the laſt of theſe, if matter *reſiſts* from the influence of ſome external cauſe, it is either the power of an *immaterial Being* conſtantly xerted upon it, or from the *impulſe* of other matter. Now if any man, in order to avoid being forced to own that reſiſtance is eſſential to matter, ſhould ſay *it reſiſts by the power of an immaterial being conſtantly exerted upon it*, that way he incurs the very thing he would deny, and which I contend for. And it would be ſtrangely perverſe to deny the reſiſtance of matter, leſt the exiſtence of an immaterial Being ſhould be evinced; and yet to own an immaterial Being, in order to deny the reſiſtance of matter. This therefore cannot be ſaid; but if it ſhould, the cauſe is given up. And if one ſhould ſay in the next place, *that matter reſiſts not internally, but by the external impulſe of other matter*, he affirms a direct contradiction: for both the kinds of matter in his ſuppoſition (the matter *impelling*, and the matter *impelled*) muſt be ſuppoſed to *reſiſt* in this very impulſe, or to *reſiſt internally*, otherwiſe the impulſe could have no effect. Thus it appears it is not in an adverſary's power to ſuppoſe matter reſiſting otherwiſe than by its internal conſtitution, or as it is a ſolid extended ſubſtance. And if we ſhould ſuppoſe the power of an immaterial Being conſtantly exerted upon matter, to make it a *reſiſting ſubſtance*; this can be no other way than as his power is conſtantly exerted upon it, to make it a *ſolid ſubſtance*. Therefore I conclude, as before, *That reſiſtance, or a* vis inertiæ, *is inſeparable from matter; or is as eſſential a property of it as ſolidity*. And therefore all the reaſoning from the beginning of the ſection hitherto, ſo far as it was *conditional*, or depended upon proving that the *vis inertiæ* was eſſential to matter, becomes now *abſolute* and *demonſtrative*. And whatever other truths, or conſequences, can be fairly drawn from this *principle* hereafter, muſt be ſuch as we may confidently rely upon.

SECT. II.

The consequences of the want of active powers in matter, viz. *that all those effects commonly ascribed to certain natural powers residing in matter are immediately produced by the power of an immaterial Being. Hence a constant and universal Providence in the material world, extending to the minutest things. Hence the necessity of an immaterial Mover in all spontaneous motions,* &c.

THE consequences of the truth established in the last section are of great weight both in *religion* and *philosophy*; therefore I beg leave still to proceed at leisure from one of these to another, and to be particular in deducing them. And, first, the chief consequence that offers to us from what hath been said hitherto is, *the necessity of an immaterial powerful Being, who first made this dead substance matter, originally impressed, and still continues to impress motion upon it.* The first thing that appears in his nature, as he is thus discovered, is his *immateriality*, being the powerful *Creator* and *Mover* of matter; for it is already evident, and shall still be made more plain, that such a *powerless, dead substance*, as matter, must owe its existence to *something else*. *Spinoza*'s absurd assertion, *That every thing in the world was God*, or that nothing but God could exist (*a*), included in it this plain contradiction of making the effect the same thing with the cause, and confounding the *most opposite* natures in the universe. For it is absolutely impossible that the same being [God] should be both material and immaterial; or void of all power, as matter is, and at once the origin of all power, as an immaterial Being must be. But particularly it appears from what hath been said, how contradictory *Hobbes*'s opinion is,

(*a*) *Præter Deum nulla dari, neque concipi potest substantia. Ethic.* Part 1. prop. 14. *Una substantia non potest produci ab alia substantia.* Ibid. prop. 8. *Ad naturam substantiæ pertinet existere.* Ibid. prop. 7. *Res nullo alio modo, neque alio ordine à Deo produci potuerunt, quàm productæ sunt.* Prop. 33.

who

who aſſerts *that there is nothing but matter in the Univerſe* (*b*). For if there were nothing in the Univerſe but a ſubſtance which reſiſts all change of its preſent ſtate of reſt or motion, or to which a *vis inertiæ* is eſſential, it is certain no change of ſtate could ever have been effected, *nor would there have been a ſubſtance in nature to which active power could have belonged.* And univerſally, as every other kind of atheiſm aſſerts matter to be endued with certain *original powers*, which may ſupply the abſence of a Deity, or of immaterial Being, in the world; this ſort of reaſoning concludes equally againſt them all, by ſhewing the impoſſibility of all their *hypotheſes* at once: and this is obvious to any perſon, without farther arguing. So that to begin with examining the nature of matter, and ſhewing its *inactivity*, makes the ſhorteſt work with Atheiſts of all denominations. And this is a more effectual method, I think, than to deny the exiſtence of matter altogether, in order to confute Atheiſts. Beſides, from this way of firſt diſcovering the Deity, a more ſurprizing ſcene of providence will immediately appear, than from any other kind of argument we could have made uſe of. In order to this, the conſideration of the nature of matter ſhall be farther purſued; the ſeveral inſtances where the power of an immaterial Being is exerted upon it, particularly ſhewn; and the effects, commonly but falſly aſcribed to *certain powers* in matter, ſhall be reſtored to their *proper cauſes*, as in right philoſophy they ſhould: which method muſt of courſe carry us into a variety of ſubjects, and through a great part of natural philoſophy.

II. To begin from the univerſal reſiſtance of matter as it is a ſolid extended ſubſtance; from this we may ſatisfy ourſelves of the abſurdity and falſeneſs of an univerſal Plenum. For, paſſing by at firſt *Lucretius*'s reaſon [*Principium quoniam cedendi nulla daret res*], if there were an infinite plenum, or even but a finite one in any part of ſpace, ſuppoſing the matter as ſubtil and fluid as poſſible; ſince as impenetrable it muſt reſiſt, N° 26. ſect. 1.) and that both in proportion to the celerity with which it

(*b*) In the 46th chapter of his *Leviathan* he ſays, The world (I mean not the earthly one, that denominates the lovers of it worldly men, but the univerſe, that is the whole maſs of all things that are) is corporeal, that is to ſay body; and hath the dimenſions of magnitude, namely, length, breadth, and depth: alſo every part of body is likewiſe body, and hath the like dimenſions; and conſequently every part of the Univerſe is body, and that which is not body is no part of the Univerſe. And becauſe the Univerſe is all, that which is no part of it is nothing, and conſequently no where, &c.

was

was ſtruck, (N° 4.) as alſo to the quantity of it, or number of particles to be ſtruck at once, (N° 6.) the fluid being the denſeſt poſſible, as without any vacuities, by ſuppoſition; the reſiſtance would be the ſame in the open air, or in an exhauſted receiver (if it be not abſurd to ſpeak of exhauſting on that ſuppoſition) as in water, or mercury (*c*): which is abſolutely contrary to experience. But really, in an abſolute plenum, the diſtinction betwixt *fixedneſs* and *fluidity* would be loſt; and we might as well conceive a fiſh to ſwim, or a bird to fly, in the heart of marble or adamant, as in ſuch a plenum: and then *Lucretius*'s principle takes place.

III. Moreover, ſince all bodies encountering in oppoſite directions, mutually diminiſh or deſtroy the quantity of motion in each other; for oppoſite forces, if equal, beget an equilibrium, and reſt; or, if unequal, the exceſs of the greater above the leſs only remains; and ſince this obtains, though in a leſs degree, when they impinge obliquely (N° 11. ſect. 1.) it follows, *That from all action of body upon body motion is ſtill impaired, and the quantity of it conſtantly decaying in the univerſe.* And here let me intreat my Reader to examine this concluſion well, and if it is rightly inferred, to admit it, and the conſequences of it, honeſtly. Now ſince matter cannot re-excite the motion in itſelf; it follows that as an immaterial Power firſt impreſſed motion on matter, ſo it ſtill re-produces the motion loſt, and makes up the decays ſuſtained. And upon this account, neither the Epicurean, nor any other atheiſtical ſyſtem of the univerſe, could have been eternal, where there is no immaterial Mover to repair the decays of motion. One of the moſt wonderful ways, to us, of exciting loſt motion in matter (if one way were more wonderful than another) is that of elaſticity. The force of reſtitution is an immediate impreſſion by an imma-

(*c*) Dr. *Pemberton*, in his Review of Sir *I. Newton*'s Philoſophy, *B.* 2. *c.* 1. ſect. 14. ſpeaking of this ſays, "And whereas ſuch a fluid whoſe parts are abſolutely cloſe together without any intervening ſpaces, muſt be a great deal more denſe than water, it muſt reſiſt more than water in proportion to its greater denſity; unleſs we will ſuppoſe the matter, of which this fluid is compoſed, not to be endued with the ſame degree of inactivity as other matter. But if you deprive any ſubſtance of the property ſo univerſally belonging to all other matter, without impropriety of ſpeech it can ſcarce be called by that name." He might have gone farther, I think; for an infinite plenum of matter that could not reſiſt, nor conſequently re-act, would, according to the reaſoning in N° 26. ſect. 1. upon preſſure (or rather without it) ſhrink up into leſs dimenſions: and one ſingle ſtroke would annihilate as much of it, as where the preſſure would have been otherwiſe propagated: that is, I conceive the whole of it in an abſolute plenum. And then indeed it would have been matter in no propriety of ſpeech.

terial

terial Mover; for it reſiſts this impreſſion, as its having *moment* in its reſilition ſhews (ſee N° 19. ſect. 1.) But often from the congreſs of ſuch bodies, more motion is excited, than was in them before the ſhock. *Hugenius* hath demonſtrated, among other ſurprizing properties of the congreſs of ſuch bodies, that if a ſeries of them were placed ſo, that they might impinge on each other directly, their quantities of matter being in a geometrical proportion, and if the leaſt is impelled againſt the next greateſt, the quantity of motion will be increaſed in each of them to the laſt. Now if there be a hundred bodies in the ſeries, and if the quantity of matter in each be double that in the former, the ſmalleſt in the ſeries being impelled againſt the next greateſt, the quantity of motion, or force, in the laſt, will be two million of million, three hundred thirty eight thouſand four hundred and eighty ſix million, eight hundred and ſeven thouſand ſix hundred and fifty ſix times greater than it was in the firſt: or the force in the laſt will be to that in the firſt, as the number 2,338486,807656.13 to 1. (*d*). This number upon trial will be found exact, I preſume; ſo that

(*d*) Let the bodies be A, B, C, D, *&c.* and as 1, 2, 4, 8, *&c.* if the diſtance betwixt A and B is called 1, the diſtance of the center of gravity from B will be $\frac{1}{3}$. The velocity of this center before the ſhock is as $\frac{1}{3}$, and as $\frac{1}{3}$ after it; and the diſtance of B from it as $\frac{1}{3}$ at the ſame time. The whole velocity of B is $\frac{2}{3}$, and the matter of it as 2; ſo its moment is as $\frac{4}{3}$. Juſt ſo, the velocity of the centre of gravity betwixt B and C, is $\frac{1}{7}$ of $\frac{2}{3}$ (B's celerity) or $\frac{2}{9}$; and C's celerity double that, or $\frac{4}{9}$; its matter as 4; its moment therefore as $\frac{4}{9}$. So D's celerity is $\frac{2}{5}$ of (C's celerity) $\frac{4}{9}$, or $\frac{8}{27}$; its matter 8; and its moment $\frac{64}{27}$, *&c.* Thus the ſeveral moments in the laſt 99 bodies are the ſeveral powers of $\frac{4}{3}$; and of the laſt it is $\frac{4}{3}|^{99}$, which number is 2,338486,807656.1299712, *&c.* The velocity is juſt as much increaſed, if the motion begins at the greateſt body. Mr. *Herman* (*Scholium Prop.* 42. *lib.* 1. of his *Phoronomia*) hath ſomewhat a different number, *viz.* 2335320732310; but it is by taking the logarithm of $\frac{4}{3}$ equal to 0.1249388; whereas, carried to more places, it is 0.124938736082999 5, *&c.* The ſecond number which he hath in the ſame *Scholium*, *viz.* 2710371348314606 7 ſhould be 2710407850234768 2, for a like reaſon; which is the decreaſe of the velocity, if the motion begin at the leaſt; or of the moment, if it begin at the greateſt. See alſo Mr. *Whiſton* concerning this, Lect. 5th, on Sir *Iſ. Newton*'s mathematical philoſophy. His numbers and account are ſomething different; but he concludes thus: "Where (ſays he) in the former caſe is ſeen a moſt prodigious increaſe of celerity; "and in the latter, a more ſtupendious augmentation of the quantity of motion." So far is the Carteſian notion from being true, that the ſame quantity of motion is always preſerved in the world. See with reſpect to this *Wolfius*'s *Element. Mechan. Theor.* 85. and the *Scholium* of it. Indeed it is plain to the ſenſe, that from the action of bodies upon bodies, motion is ſtill decaying in the univerſe, and reaſon eſtabliſhes this ſtill more authentically. If two bodies encounter with equal force, it is extinguiſhed in both ſides; and this is no leſs true when they are *elaſtic*, than when they are *unelaſtic*. The motion is certainly once wholly extinguiſhed in both caſes; for.

that if the firſt was impelled with but as much force as the ſtrength of a child could impreſs, the force in the laſt would be inconceivable. The battering rams of antiquity, or the modern cannon would ſcarce help us to form a notion of it. How then is it poſſible to conceive that poor ſluggiſh matter ſhould ſo prodigiouſly increaſe the quantity of motion in itſelf, without a foreign cauſe, an immaterial Power! And yet, rightly conſidered, this is not more wonderful, than that a ſtone, as ſoon as one lets it go, ſhould begin to move to the earth, and ſtill ruſh forward with a greater and greater rapidity. If this laſt motion were ſeen but rarely, the ſchools of philoſophers would have been full of it: nor is there any one ſo little curious, who would not go far to ſee ſuch a rare ſight, if it happened but once a year. But the mere difference of happening *frequently* or *ſeldom* cannot change the nature of a thing truly wonderful in itſelf. The conſtancy of an appearance is not a mark of the fatal neceſſity of it; but of the goodneſs of that Being who makes it conſtant for our benefit; which is the preſent caſe, as was ſaid above, N° 25. of the laſt ſection.

IV. As elaſticity in general hath ſomething very ſurprizing in it, ſo that of the air deſerves our particular notice. What is called elaſticity, or ſpring in the air, is only a repulſive force exerted between its particles (*e*).

for if contrary force doth it in one caſe, it cannot not do it in the other, be it re-excited what way it will: and if matter cannot move itſelf in any caſe, it cannot move itſelf here; whence the concluſion is obvious. As I have ſaid above then, I wiſh men would examine this argument on all ſides; and if they cannot find a fault in it, that they would embrace the conſequences of it with a philoſophical ingenuity. I am of opinion, and think it would be eaſy to ſhew it, if one had leiſure to run through the ſeveral particulars, that unleſs *an immaterial Power* continually re-excited motion in the material univerſe, all motion would ſtop in it, in a very ſhort time, perhaps in leſs than half an hour, except that the planets would run out in ſtreight-lined directions. And then what a face of things ſhould we have! darkneſs, ſilence, and unſucceſſive reſt. For certainly matter of itſelf *can purſue no end, obey no law, nor change the direction* of its motion, nor any way *alter its preſent ſtate*: and ſince in all motions in the univerſe *an end is purſued, a law obeyed, the direction changed*; and ſince in all the remarkable phænomena of nature there is a circulation of motion; the truth of what I here ſuggeſt muſt be pretty obvious to any thinking perſon.

(*e*) See *s'Graveſande's Introduct. ad Phil. Newton. l.* 2 *c.* 13. *Experiment.* 3. and the reaſoning upon it, where he ſays, *Sequitur ac'rem conſtare ex partibus ſeſe mutuò non tangentibus, & ſeſe mutuò repellentibus. Talem particularum proprietatem in multis occaſionibus detegi jam vidimus; illamque & hìc obtinere ſatis patet; cauſa verò hujus nos omnino latet, & pro lege naturæ ipſa habenda eſt, ut ex dictis inter* N° 4 & 5 *liquet.* In which place, as much is meant, I believe, as I here expreſs; *viz.* that the repellency between the particles of air is the immediate effect of the power of God. He ſays after N° 4. *Noſtri enim reſpectu non intereſt an quid immediatè à Dei voluntate pendeat, an verò mediante cauſâ, cujus nullam ideam habemus, producatur.*

For

For if a certain quantity of matter, as the compreſſed air in a condenſing engine, exerts a force to dilate itſelf every way (ſpeaking after the common manner, as if it were active) and take up more room, the parts of it have a tendency to recede from each other. No ſort of attraction can explain ſuch an appearance. Nor will little elaſtic convolutes, rolled up like the ſpring of a watch, nor ſmall globules repleniſhed with yet a more ſubtil elaſtic matter, agree with the perfect fluidity obſerved as much in all degrees of the compreſſion of the air, as in its dilatation (*f*): not to mention that theſe hypotheſes explain elaſticity *by elaſticity*. Whence the particles of air muſt repel, and keep each other at a diſtance: and the repulſive force muſt be conceived to be between every particle alike. For if it were not, the greater force would ſtill prevail on the leſs, diſpoſing the particles at equal diſtances, till an equilibrium were ſettled through the whole maſs. Therefore any quantity of air, how little ſoever, repels all the reſt as ſtrongly, as it is repelled by it: or the force of any part *counteracts* the force of the whole maſs. This force is equal to the weight of the whole ſuperincumbent atmoſphere; or the weight of a column of water thirty one feet high, or of a column of mercury twenty eight inches high, and whoſe baſe is the ſame with the portion of the air we take (*g*): and this when the air is not compreſſed, but in the ſame ſtate with the outward atmoſphere. Now the uſe that I would make of this is, to ſhew that, abſtracting from the reaſoning in N° 14, 15 and 16. ſect. 1. this is another contradictory appearance, unleſs we call in an immaterial Mover, that a thin film of air (for the whole force muſt be lodged in that, by what was ſaid juſt now) of a foot ſquare, *v. g.* whoſe natural reſiſtance doth not amount

(f) In omni enim expanſione aut compreſſione, particulæ facile moventur inter ſe. Idem. ibid. And Sir *Iſ. Newton* ſpeaking of this, (*Opt. p.* 371. *edit.* 3.) ſays, " It ſeems alſo to follow from " the production of air and vapour. The particles, when they are ſhaken off from bodies by " heat or fermentation, ſo ſoon as they are beyond the reach of the attraction of the body, re- " ceding from it, and alſo from one another, with great ſtrength, and keeping at a diſtance, ſo " as ſometimes to take up above a million of times more ſpace than they did before in the " form of a denſe body. Which vaſt contraction and expanſion ſeems unintelligible, by feign- " ing the particles of air to be ſpringy and ramous, or rolled up like hoops, or by any other " means than a repulſive power."

(g) Wolfius, Element. Aërometricæ, theor. 1. *Elater aëris inferioris æquatur ponderi totius ſuperioris ipſi incumbentis.* And *cor.* 1. *Quoniam pondus aëris ſuperioris inferiori incumbentis æquatur ponderi columnæ aqueæ, cujus eadem cum volumine aëris baſis, ſed altitudo triginta unius pedum, vel etiam columnæ mercuriali, cujus altitudo* 28 *digitorum; elater aëris inferioris eidem columnæ aqueæ, & mercuriali æquatur.*

to one grain, ſhould yet reſiſt, and ſupport a weight, that might be a load for an elephant. The weight of a whole cubic foot of air is but about 506 grains, and the weight of ſuch a film would ſcarce be a 506th part of that (*b*); and the pillar of water, or atmoſphere, ſupported weighs about one thouſand nine hundred and eighty four pound, (a cubic foot of water weighing about 64 pound). But if we conſider that the elaſtic force of the air is reciprocally as the volume into which it may be compreſſed, and that five, ſix, or ſeven atmoſpheres may be thrown into the condenſing engine (*i*), this ſingle grain of air makes a reſiſtance that would ſupport ſeveral tun weight. And all this at a diſtance, and without material preſſure or action, or coming into actual contact with the weight ſo ſuſtained: ſo certain is it that an inviſible hand intervenes here! Nothing can act where it is not; nor therefore matter beyond its own terminating ſurface. No human power, or invention, could bring the particles of air into actual contact, like thoſe of water. They would then reſiſt like thoſe, and gravitate equally perhaps. It is no leſs than a downright contradiction that the leſs the particles of matter are, their force and action ſhould be the greater. The very contrary of this is evident. Matter can only reſiſt in proportion to its quantity; and that by actual preſſure and contact. That a ſlender film of air ſhould ſupport a weight greater than the maſſieſt beam could, without touch or preſſure, is plainly impoſſible. Let me endeavour to render this appearance obvious and familiar, by a plain and eaſy compariſon. If the leaves of a book, all in a parallel ſituation, and without coming to touch each other, ſhould ſupport a weight of many thouſand pounds, even without touching or having any communication with it; no body would ſay that the power of ſome other being was not exerted in performing ſuch an effect; for every one of theſe leaves would concur as little in it, as if they were not there. And ſuch an effect is performed hourly, conſtantly; round us, over our heads.

V. If then we lay together what hath been concluded N° 14, 15, 16, 17, 26 of the laſt ſect. and N° 3 and 4. of this; it follows that whatever matter is ſaid to *attract*, whatever matter is ſaid to *repel*, whatever matter is ſaid to *reſtore* itſelf; whatever matter is *heavy*, or tends to a center, whatever matter is *light* (which is but comparative heavineſs, and perhaps

(*b*) *Ibid. probl.* 5. *Invenire pondus unius pedis cubici aëris*; and the ſcholium of it.

(*i*) See *ibidem theor.* 9. *elateris aëris compreſſi eſt ad, &c.* and Mr. *Hawkſby*'s experiments.

all

all theſe various motions are reducible to attraction and repulſion) ; in a word, matter of all ſorts, is but a dead ſubſtance in theſe effects ; and it is another Being that performs all. And therefore the *deſcent* of heavy bodies by gravitation, or (again) by the laws of hydroſtatics (which are but the methods of gravitation as it obtains in fluids) the *running* of rivers, the *riſe* of vapours, the *fall* of rains, the *motions* of the clouds and wind, the *rolling* of the waves ; in ſhort *all* the *motions* we obſerve in the heavens, or on the earth, except the ſpontaneous motions of animals, and the immediate conſequences of theſe (of which exception yet more hereafter) are the *immediate work of the firſt Cauſe* ; as alſo the production of all vegetable and animal bodies, and all the mechanical motions that exiſt in theſe when produced (of which alſo more by and by) are to be aſcribed to his immediate efficiency and power. For all theſe, without exception, are but the *effects* of the *natural powers* of matter (as they are called) and thoſe powers are no other than the forces *immediately impreſſed by him*, in certain circumſtances, to overcome its reſiſtance to motion ; and called natural powers, becauſe of the conſtancy and regularity of the effect, the circumſtances remaining the ſame (*k*). This is a ſurprizing,

(*k*) The invariableneſs and conſtancy of theſe effects, is the reaſon, I think, why we generally fancy them the action of matter upon matter only : but as I ſaid lately, the conſtancy of an effect is no mark of the neceſſity of it, but of ſomething elſe, (ſee N° 3. of this.) It is an unaccountable prejudice to be entertained by reaſonable men and philoſophers, that *no deſigning cauſe*, but ſuch a *paſſive* and *neceſſary* one as matter, could obſerve ſuch regularity and proportion ! We ought to make juſt the contrary concluſion : for a deſigning, intelligent Cauſe is neceſſary in all proportion and regularity. (The work of chance and dead matter could not be ſo qualified.) And this not only in the firſt inſtitution of the proportion, but in the conſtant obſerving of it. The action of gravity decreaſes, as the ſquares of the diſtances between the gravitating bodies increaſe : As this is an arbitrary inſtitution, which no mechaniſm can account for ; ſo no man, I believe, that ſeriouſly reflects upon it, can imagine that it could be mechanically obſerved. It is this very particular therefore that eſtabliſhes the contrary of what is commonly drawn from it. Dr. *s'Graveſande* ſays, in the place cited above, at N° 17. ſect. 1. *Sed illam* [*gravitatem*] *non ſequi ex ullo impactu, juxta leges nobis notas, clarè patere contendimus.* What cauſe is ſo proper to act *regularly* in certain circumſtances, and *proportionably* at certain diſtances, as an infinitely powerful and knowing one ? Indeed if we were to impreſs a force on but one ſingle particle of matter, it would be impoſſible for us to obſerve ſuch a regularity and proportion, without exceeding, or coming ſhort. And hence (though there is no conſequence in arguing from us to him) we think no intelligent Being can perform ſuch an univerſal effect. Hence again, what we think the power of no being can reach to, we aſcribe to a cauſe void of all power, dead matter and blind neceſſity, as the likelieſt to perform great things ! This is not as it ſhould be ; philoſophy bids us ſeek out an adequate cauſe for every effect, which certainly we ſhall find, if we reaſon rightly ;

active ſcene; quite different from *Lucretius*'s view of nature——*Totum video per inane geri res*,——where chance and dead atoms manage the bu-

rightly; for there is not a defect of reaſon in the nature of things. Explain the preſent phænomenon how we will, we muſt ſtill have recourſe to this Being for the proportion and regularity of it, both in the inſtitution and obſervance: no ſhift, no ſophiſtry can ſave us from this neceſſity. It is in our power, it is ſaid, to excite electricity in amber, wax, glaſs; to hammer ſteel, or heat it in the fire again. Not to enquire minutely here what it is we do, or how much of the effect we perform; I ſay all this is true, nor ſee I any inconvenience from it. There is no difference, as to the regularity, between exerting the power immediately himſelf, and planting it to be regularly exerted by matter, if that were otherwiſe poſſible: and it will appear, I hope, that this is not the only inſtance, where the infinite power of God condeſcends to act upon our ſpontaneous election, (ſee N° 21 of this) and this without any ill conſequence in philoſophy. If there are certain effluvia excited by rubbing amber, glaſs, *&c.* that drive away, or bring nearer, light bodies; which is not impoſſible; yet what attracts or repels theſe effluvia? They are ſtill ſluggiſh, inert little bodies that reſiſt all change of ſtate. We can neither proceed *in infinitum*, to other and other effluvia; nor find the firſt moving principle in matter of any ſort.

Upon the preceding reaſoning, and the whole ſubject of this paragraph, it hath been obſerved, " That by my zeal to find more than mechaniſm in nature, ſome will think I take too " much of mechaniſm away, while on every occaſion I make immaterial principles interfere, " which I ſhould rather reſerve, *cum dignus vindice nodus:* and that upon this account this argu- " ment, in the preſent diſpoſition of it, will be apt to ſhock many readers." But it is anſwered, that ſince the particulars mentioned in this paragraph are the conſequences of that principle laid down in N° 14 and 15, and afterwards concluded N° 26 of the laſt ſection; if there were any hazard in owning them, then indeed my adverſaries could preſs them upon me, and make me ſtand by them, or relinquiſh the principle that infers them. If that principle is allowed then, I cannot abandon theſe conſequences of it. And if it is wrong, it would be fooliſh in me to think ſuch a piece of ſophiſtry ſhould paſs undetected. All therefore turns on that. As to mechaniſm, I ſhall conſider it as exactly as I am capable of hereafter. Only let me obſerve here, that I am not ſingular in advancing theſe things: a much greater man carries the argument juſt the ſame length. Let it be allowed me to tranſcribe the paſſage. It is in Dr. *Clarke*'s Demonſtration, *&c.* part 2. p. 300. edit. 4. and p. 221. edit. 6. *All things that are done in the world* (ſays he) *are done either immediately by God himſelf, or by created intelligent Beings: matter being evidently not at all capable of any laws or powers whatſoever, any more than it is capable of intelligence; excepting only this* one *negative power, that every part of it will always and* neceſſarily *continue in that ſtate, whether of reſt or motion, wherein it at preſent is. So that all thoſe things which we commonly ſay are the effects of the* natural powers *of matter, and laws of motion; of* gravitation, attraction, *or the like; are indeed (if we will ſpeak ſtrictly and properly) the effects of God's acting upon matter* continually and every moment, *either immediately by himſelf, or mediately by ſome created intelligent Being: (which obſervation, by the by, furniſhes us, as has been before noted, with an excellent natural demonſtration of* Providence.) *Conſequently* [pray let the following words be marked] *there is no ſuch thing, as what men commonly call the courſe of nature, or the power of nature. The courſe of nature, truly and properly ſpeaking, is nothing elſe but the will of God, producing certain effects in a continued, regular, conſtant, and uniform manner: which courſe or manner of acting, being in every moment perfectly arbitrary, is as eaſy to be altered at any time, as to be preſerved.*

ſineſs

ſineſs of the world! The admirable mechaniſm diſcovered in the ſtructure of a plant or animal, is not only the effect of his wiſdom and skill in the firſt contrivance, but the minuteſt office in the œconomy is *inceſſantly performed* by his almighty finger. His power is ſtill working *near* us, *round* us, *within* us, in *every part* of us. And this we may be aſſured of, if demonſtration is to be relied on. In thoſe frightful things, *ſtorms* and *tempeſts*, thoſe which look likeſt the want of government in the world, *earthquakes* and *volcano's*; this truth lets us ſee the God of nature, wiſely, knowingly, for the beſt purpoſes, *puſhing*, *ordering* every particle and every atom. Wiſdom and knowledge preſide even there; and all will be well. He hath not given the reins of the world out of his hands; nor planted the laws by which it is to be governed, in brute-matter. To ſay he hath lodged in matter, certain powers, whereby events are to be directed, is but one degree removed from Epicurean neceſſity *(l)*; and to ſay he ſtill ſuperintends the execution of theſe powers himſelf, though it is more pious, is ſcarce better philoſophy; for beſides the impoſſibility of planting powers in matter inconſiſtent with the nature and eſſence of it, a Being, who by the excellency of his nature, is neceſſarily every where preſent, all-knowing and almighty, doth not want to be relieved of a part of the task. Such philoſophy ſuits only *Lucian*'s deities.

(l) I here beg leave to cite another paſſage from the ſame author. It is part 2. p. 16. edit. 4. and p. 14. edit. 6. Let from the beginning of the paragraph be read; what is to the purpoſe here follows: *For not to ſay that, ſeeing matter is utterly incapable of obeying any laws, the very original laws of motion themſelves cannot continue to take place, but by ſomething ſuperior to matter,* continually *exerting on it a certain force or power according to ſuch certain and determinate laws; 'tis now evident beyond queſtion, that the bodies of all plants and animals, much the moſt conſiderable parts of the world, could not poſſibly have been formed by mere matter, according to any general laws of motion. And not only ſo; but that moſt univerſal principle of gravitation itſelf, the ſpring of almoſt all the great and regular inanimate motions in the world, anſwering (as I hinted in my former diſcourſe) not at all to the ſurfaces of bodies, (by which alone they act one upon another) but entirely to their ſolid content; cannot poſſibly be the reſult of any motion originally impreſſed on matter, but muſt of neceſſity be cauſed by ſomething which penetrates the very ſolid ſubſtance of all bodies, and continually puts forth in them a force, or power entirely different from that by which matter acts on matter. Which is, by the way, an evident demonſtration, not only of the world's being made originally by a ſupreme intelligent Cauſe; but moreover, that it depends every moment on ſome ſuperior Being, for the preſervation of its frame; and that all the great motions in it are cauſed by ſome immaterial Power, not having originally impreſſed a certain quantity of motion upon matter, but* perpetually *and* actually *exerting itſelf* every moment *in* every *part of the world.*

VI. This point of a constant impression made upon matter *ab extra* is wonderfully plain, if we consider the motion of the earth and planets. These prodigious masses of matter simply propelled, though that alone requires some *almighty Mover*, would move on for ever through the endless regions of space, in one uniform direction; since by N° 11. of the last they as much resist a change of the direction, as of the quantity of their motion, these two being really inseparable. But rolling round as they do, they are continually turned in from this direction, and a new one is impressed upon them every instant; or the resistance they make to change their direction is overcome incessantly. It would not be enough to overcome it in any one instant, since they would immediately cease to roll round. When a stone is whirled round in one end of a string, the other end of which is held in the hand, it is thus kept changing the direction continually, and not by any tendency in the stone itself; for if left to its own tendency, it flies off in a line touching the curve it describes in that point: it is the action of the string upon it that begets this constant change of direction. Just so, any great body in the heavens, revolving about a central body, would incessantly fly off from its orbit, if the *power* of the *first Mover*, answering to the action of the string in this familiar instance, did not keep it in. In circular motion nothing is more certain than *centrifugal* force; that is a tendency to leave the circular motion, and run on in a strait line; and therefore nothing is more certain, than a *centripetal* force in such motion, that is an extraneous power impressed to overcome this tendency, and bring it incessantly back (*m*). If we should say with *Des Cartes*, that a fluid circulating round might overcome the resistance of a revolving planet to change its direction;

(*m*) I cannot help thinking that the ancient sage *Pythagoras*, considering he was no ordinary geometer, and the first author of the *Copernican* system, had this very centrifugal force, and contrary centripetal impulse in view, who, after having asserted God to be νοῦν καὶ ψυχωσις τῶν ὅλων, adds, that he is κύκλων ἁπάντων κίνασις, the motion, or mover of all circles. Indeed a circular motion is (if I may be allowed such an expression) a circle of wonders. But I must quote this whole passage of *Pythagoras*, as I find it cited before his *aurea carmina*. Ὁ μὲν Θεὸς εἷς, (says he) αὐτὸς δὲ οὐχ ὥς τινες ὑπονοοῦσιν ἐκτὸς τᾶς διακοσμήσεως, ἀλλ' ἐν ἑαυτῷ ὅλος ἐν ὅλῳ τῷ, κυκλῳ ἐπισκοπῶν πάσας τὰς γενεσίας ἐστί· κράσις ἐὼν τῶν ὅλων ἀνώνων, καὶ ἐργάτας τῶν αὐτοῦ δυνάμεων καὶ ἔργων· ἀρχὰ πάντων· ἓν ἐν οὐράνῳ φωστὴρ καὶ πάντων πατὴρ, νοῦς καὶ ψύχωσις κ. τ. λ. What means this ἐργάτας τῶν αὐτοῦ δυνάμεων καὶ ἔργων? What I then assert through this whole section is no new notion, if *Pythagoras* asserts that God himself is the exerter of all his own power; which I think these words import.

besides

beſides the other inconſiſtencies in ſuch a ſuppoſition (*n*), it is obſervable that this but multiplies the neceſſity of the action of the firſt Being, out of an unwillingneſs to admit it. For that centripetal impulſe, which is neceſſary to be given to the revolving body in every point of its orbit, muſt be ſuppoſed to be given here to every part of this fluid, in every point of its revolution; ſince it is ſuppoſed a fluid, and not a continuous, ſolid maſs. The evaſion contrived for this, *viz.* an univerſal Plenum, whereby the extreme parts of any vortex are kept in by the confines of the neighbouring vortices, hath been ſhewn to be falſe, N° 2. of this. And allowing it were true, the motion conſumed by attrition at the extremes, ought to be renewed at the center by the power of the ſame Being (*o*). There is alſo this particular that merits our attention in the motion of theſe great bodies, that it is this centripetal impulſe that keeps the projectile force conſtantly in vigour; for between every laſt centripetal impulſe, and laſt projectile force, a new projectile tendency is generated. If it were otherwiſe, that is, if the direction were changed in every part of the orbit, and no new centripetal force impreſſed, to help to generate a new tendency along the tangent; which, I think, implies no contradiction to be ſuppoſed (*p*); no body could perform above half a revolution, let the firſt projectile force impreſſed be as great as it can be ſuppoſed: for it is contradictory to ſuppoſe that one individual impulſe ſhould make it move in two oppoſite directions; as it ought to do at the two extremities of the ſame diameter of its curve. Therefore in this motion, thus conſidered, there is a conſtant impairing of the former quantity of motion, by the conſtant change of direction; and as conſtant a reparation of it, by the new centripetal impulſes, ſtill generating a new projectile tendency.

(*n*) See what Dr. *Pemberton* ſays of this, in his View, &c. *b.* 2. *ch.* 1. *ſect.* 2.

(*o*) In the ſame place he ſays, "There is another remark made upon this motion by our "author; which is, that ſome viviſying force would be continually neceſſary at the center of "the motion.".

(*p*) If a firm unelaſtic obſtacle change the direction of a moving body, alſo unelaſtic, no new force will be impreſſed on it: and if we ſhould ſuppoſe this done conſtantly, for half a revolution, it will come up to the caſe here expreſſed. For, as was ſaid in N° 11. ſect. 1. whatever changes the direction of a body in motion without adding a new force to it, takes off one of the compounding forces. And we cannot conceive in one ſingle impulſe any part of the compounding force to be in quite an oppoſite direction; eſpecially ſince compounding forces begin to oppoſe each other, when the angle formed by the lines of their directions becomes obtuſe.

VII. Let us next conſider the coheſion of matter, and we ſhall find that *reſt* demonſtrates more palpably, if poſſible, the immediate power of God impreſſed on it, than *motion* doth; and that upon all the parts, to ſuch a minuteneſs as our thoughts can never purſue, and to an univerſality, that admits of no exception, but by a contradiction. All the ways that men have attempted to account for this mechanically, and without intereſting the immediate power of God, have been no better than a ſuppoſing the thing to be accounted for. Thus when it is ſaid, that this is the effect of ſome ſuperincumbent or ſurrounding fluid, that binds, and keeps together the parts of matter; this cannot be true of all the parts of matter. The queſtion recurs, what is the cauſe of the coheſion of the parts of this fluid? Any part of it muſt be conſidered as conſiſting of yet other parts: if the coheſion of theſe parts is not accounted for, but ſuppoſed; and then theſe ſuppoſed to be the cauſe of the coheſion of other parts of matter, nothing at all is accounted for (*q*). Beſides, a ſurrounding fluid could not cauſe the parts of other matter to ſtick together, and make up a ſolid ſubſtance, but by preſſure on them, gravitation towards them, or being attracted by them: but we have ſeen that theſe are the im-

(*q*) And this is no leſs true in other reſpects than that of coheſion. To account for the gravity of bodies by a vibrating elaſtic medium, is to account for one power of matter by another unaccounted for power of it, whence of conſequence neither is accounted for. When we are ſearching for a motive power in nature, and theſe vibrations are ſuppoſed, it amounts to little more than ſuppoſing motion in matter to account for motion in matter. Or when this elaſticity is made to conſiſt in the mutual repulſe of the particles of this medium; it is as if we ſhould ſay, ſome parts of matter are impelled to each other, becauſe other parts recede from each other. This ſays nothing to the origin of motive power. It is true, when the immediate material impulſe that produces ſuch or ſuch an effect, can be fairly proved, it is ſo much advancement in philoſophy; but it does not much towards the ſolution of this queſtion, whether all is material impulſe; or whether there is an immaterial Mover at the head of nature? If ſome great philoſopher ſhould tell one, who wanted aſſiſtance in the ſolution of this queſtion, that he could aſſign the mechanical cauſe of ſuch a power of matter, and the mechanical cauſe of that cauſe, and another of that, and ſo on for ten or a hundred ſteps; but for want of the next mechanical cauſe above the laſt, he could go no farther; his ſcholar would be juſt where he was. Can we not come to the knowledge of the firſt immechanical cauſe, but by the *knowledge* of ſtill another mechanical one? Then the ſearch is ſuppoſed endleſs. Where would we turn next, if we could give the mechanical cauſe of gravity? ——— To ſearch the mechanical cauſe of that cauſe? At laſt, becauſe our faculties cannot go higher, we muſt leave the whole in doubt. *It is eaſy here to miſtake the end of our enquiries, and to think ourſelves diſappointed in finding what we firſt ſet out in ſearch of; to wit, The firſt and immechanical cauſe.*

pulſes

pulſes of an immaterial Agent, and no powers inherent in matter. The hypotheſis of hamuli or branchings, that keep together the parts of bodies, by being entangled and implicated into one another, is liable to equal difficulty; for ſtill it remains to be explained what makes the parts of theſe hooks ſo firmly cohere.

VIII. But we may be ſatisfied from the reaſoning above, that this coheſion is the effect of the conſtant action of the Author of matter upon it. For matter conſidered ſimply in itſelf, can only reſiſt a change of its ſtate of reſt, in proportion to its quantity, and is incapable of any greater degree of reſiſtance, without ſome external action to keep it in that ſtate. 2 A will make a double reſiſtance, and 3 A a triple reſiſtance, to be moved with the ſame celerity, as once A. It is contradictory to imagine it can make more reſiſtance. For, let us ſuppoſe as much force applied to it as would overcome this reſiſtance to be moved with a certain degree of celerity; and if we ſuppoſe it yet to reſiſt more, ſince there is not an equilibrium between the two forces, we ſuppoſe it to move of itſelf the contrary way, by this exceſs of reſiſtance; that is, not to reſiſt, but effect a change of its ſtate. Now, ſince this is all that matter, as matter, can do, it follows that where-ever there were force enough applied, to overcome the reſiſtance of any part of a body, as of a rod of iron, *v. g.* to be moved with a certain celerity, it ought to be detached from the reſt of the body, and be moved with that celerity: and yet we ſee the parts of this rod will reſiſt a vaſtly greater force, before they can be ſeparated, than would move the whole with a conſiderable velocity. Therefore this muſt be the effect of an immaterial impulſe, the force of which is equal to the difference between the reſiſtance the parts of the body actually make againſt being ſeparated, and the reſiſtance theſe parts would make by their *vis inertiæ*, to be ſimply moved, if they were ſeparated. And it is to be obſerved in this argument, that any finite force will move any aſſigned body with ſome velocity; for in the ſhock of unelaſtick bodies, the velocity of both after the congreſs, is to the velocity of the impinging body before, as the impinging body is to the ſum of both bodies: wherefore as long as the impinging body bears any ratio to the quieſcent one, the velocity after the impact will always be ſomething. From this we may be helped to eſtimate, or conceive, how many thouſand, nay millions of times, the reſiſtance of matter is greater from this external impulſe of coheſion, than from its own natural inactivity: and that

not only in hard bodies, but in the elements or conſtituent parts of all bodies; as will appear as we go on.

IX. This impulſe, or mutual attraction, for it is the ſame thing which we name it, ſince we muſt conceive it external to matter (*r*) is called by philoſophers the attraction of coheſion, in diſtinction to the attraction of gravitation: and it *is the cauſe* that in different degrees of propinquity and contact, the parts of matter cleave together with ſuch different degrees of force, as to conſtitute all the different degrees of ſolidity and compactneſs, of fluidity and brittleneſs, obſervable in bodies (*s*).

X. This attractive power muſt be conceived to be between all the poſſible parts of bodies. Where-ever it did not obtain, there a ſeparation could be eaſily effected; and a force impreſſed on any part of a body (ſteel, *v. g.*) would carry that part along only. When the parts of a body are divided as much as can be, by any external force applied, it ſhews that the parts yet undivided cohere more ſtrongly; otherwiſe the diviſion ſhould begin there firſt. It is the eaſy ſeparation of the parts of a certain bulk only, that makes a body, ſoft, fluid, friable. If there were not a ſtronger coheſion between the particles which compoſe theſe parts, we can hardly imagine what would be the conſequence. Water is not compreſſible: this is not becauſe of its denſity, or want of vacuities, (mercury is fourteen times denſer) but becauſe of the firmneſs of its conſtituent parts, or unyieldingneſs to change their figure. So ſtrong is the coheſion of theſe little corpuſcles! Abſtracting from this, it might be crowded up into one fourteenth part of

(*r*) *s'Graveſande,* ſpeaking of this very attraction of coheſion, defines it thus: *Per vocem attractionis intelligo vim quamcunque quâ duo corpora ad ſe invicem tendunt; licet forte illud per impulſum fiat.* Cap. 5. de cohæſione partium. Def. 4.

(*s*) Mr. *Worſter,* in his account of the principles of natural philoſophy, after he hath pretty largely treated of the attraction of coheſion, adds, p. 22. *Having proved the reality of this attraction, it is no difficult matter to ſhew farther, that ſuch a power is ſufficient to explain how the parts of bodies may ſtick together with as many different degrees of coheſion as have been obſerved in nature. Therefore by the firſt philoſophical rule, this attraction ought to be eſteemed the true cauſe of coheſion of parts; and for that reaſon it is called the attraction of coheſion. Particles of matter whoſe weight is greater than their attraction, can produce only an incoherent maſs like a heap of ſand. Particles of matter whoſe attraction is but very little greater than their weight, ſhall conſtitute a fluid. Particles of matter whoſe attraction is very much greater than their weight, ſhall form a compact and ſolid body. If the attraction exceeds the weight in a moderate degree, they will compoſe a ſoft body.*

its preſent bulk, and not be denſer than mercury; or one nineteenth part of it, and not be denſer than gold. The leſs the particles of matter are, the leſs force it would require to overcome their *vis inertiæ*, if there were no other principle, or extraneous power that acted; *and the more eaſily the parts of theſe might be ſeparated:* and yet the farther down the diviſion goes, it ſhews but the greater firmneſs of theſe leſſer parts, ſince they are laſt in yielding. This is contradictory to there being no force but the force of inactivity exerted in them. Whence this *remarkable property* of matter appears, *That the force of coheſion* (that is of an extraneous power to keep the parts of the ſmalleſt corpuſcles in their relative ſtate of reſt among themſelves, by N° 8. of this ſection) *is greateſt, where the force of inactivity to remain in that ſtate is leaſt.* Every man is intreated to conſider this at leiſure with himſelf, and to draw that conſequence from it which it will bear. To me it appears an irrefragable inſtance of Almighty Power. And yet, it is neceſſary it ſhould be ſo; the conſiſtency of natural bodies requires it. All the bodies we are concerned with in architecture, agriculture, *&c.* nay our own bodies not excepted, would be like ſand, duſt, or rather infinitely fluid things, if the parts of them yielded to that force, which would ſimply overcome their inactivity. And after all the diviſions that are performed in the conſtituent parts of bodies, that are wrought either by the operations of art, or the changes they undergo in nature, we are neceſſitated to conclude, that the laſt and leaſt parts cohere moſt ſtrongly; otherwiſe they would have yielded to that force that overcame the reſt. Nor can we conceive how in any of the operations of nature or art, every the leaſt particle of matter can be ſeparated from every other part. Such laſt parts ſhould be unextended. *Lucretius* was ſo much aware of the neceſſity of the ſtrongeſt coheſion in the leaſt parts of matter, that he ſays (*rightly I think*) if it were otherwiſe, a touch would diſſolve all body; every force [*vis quæque*]: and therefore he makes his atoms infrangible by any power (*t*) *in which laſt he is wrong*; for certainly the power

(*t*) *Denique res omneis eadem vis, cauſáque volgò*
Conficeret, niſi materies æterna teneret
Inter ſe nexas minùs aut magis endopeditè.
Tactus enim lethi ſatis eſſet cauſa profecto:
Quippe ubi nulla forent æterno corpore, eorum
Contextum, vis deberet diſſolvere quæque.
At nunc inter ſe quia nexus principiorum
Diſſimiles conſtant, æternáque materies eſt,

power that binds them together can diſſolve them; for he was not equally aware of the contradiction in ſuppoſing, *that a part of a thing could make an inſuperable ſtruggle not to change its ſtate, when the whole thing can make but an indefinitely ſmall reſiſtance to change its ſtate.*

XI. Now ſince there muſt be a coheſion between every poſſible part of matter (*u*); the very conception of ſolidity implying coheſion in it (*v*); and coheſion implying extraneous impulſe (N°. 8). This is that conſideration that ſpreads the inceſſant action of the God of nature through the whole ſyſtem; *to a minuteneſs, as was ſaid, that our thoughts can never purſue; and to an univerſality, that admits of no exception but by a contradiction.* In the out-lying regions of the Univerſe, at the center of the earth, no where *not*, the immediate action of God binds together the parts of matter, and conſtitutes ſolidity. Indeed it is amazing to think of it; one durſt hardly venture to affirm it, if the force of reaſon did not ſupport the aſſertion. But it agrees well to be the work of an infinitely powerful and perfect Being; and philoſophy aſſures us it is his work (*x*); though we

Incolumi remanent res corpore, dum ſatis acris
Vis obeat pro texturâ cujuſque reperta.

l. 1. ver. 239. ſee alſo from ver. 566 to ver. 636.

(*u*) Dr. *s'Graveſande, (loc. citat.) Cohæſionis lex peculiaris eſt, omnes particulas vi attractivâ gaudere.* N° 31.

(*v*) *Idem. ibid. Hæc omnia* [hardneſs, ſoftneſs, fluidity, to wit, in the three former definitions] *a cohæſione partium pendent; quò arctior eſt, eò magis ad perfectam duritiem corpus accedit. Durities verò particularum minimarum ab illarum ſoliditate non differt, & eſt proprietas eſſentialis corporis, quæ non magis explicanda eſt, quàm quare corpus ſit extenſum, & mens cogitet.*

(*x*) Mr. *Worceſter* above mentioned, ſpeaking of attraction and repulſion, ſays, *Nor is the cauſe of theſe active principles altogether occult and unknown; for though perhaps it may be difficult to determine how far ſome of theſe principles may depend on any of the reſt, or whether all of them do not flow from ſome other more general principle, as yet undiſcovered; yet this is moſt certain, that either theſe active principles themſelves, or at leaſt that more general One, from whence they reſult, is altogether immechanical and independent from matter, and can only proceed from the firſt Cauſe and Author of all things.* p. 9 and 10. This is very plain and expreſs, and advances the concluſion here eſtabliſhed, as far as it is in N°. 18 of the laſt ſection.

Concerning this argument drawn from the coheſion of matter for an immaterial power exerted on it, it hath been obſerved, *That Mr.* Bernouilli *of late has been ſo far from allowing that the leaſt particles of fluids, or of ſolids, are perfectly hard, that he affirms the exiſtence of ſuch particles are impoſſible. Some will think theſe things ought to be more agreed to amongſt philoſophers, before they can be held as ſo ſtrong proofs of natural theology,* &c. But with ſubmiſſion, if the parts of any body cohere together by a ſtronger force than what would ſerve to move the whole body with

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we generally uſe that expreſſion of courſe, without conſidering what muſt be the neceſſary import of it.

XII. Having

a conſiderable velocity: that is, if the reſiſtance from coheſion is many thouſand times greater than their ſimple *vis inertiæ*; and if the *vis inertiæ* is the only power that can be inherent in them; all that I aſſert for an immaterial cauſe of coheſion, follows, I humbly conceive, *demonſtratively*. And this appearance is too plain to be denied: a man can throw a pebble, a piece of wood, the rod of iron I mentioned, a great way; but he can ſcarce, by any effort, break the coheſion of their leaſt parts. If there be ſuch things as hard bodies, their parts muſt be hard: for this is no more than to ſay, that if there be ſuch things as firmly cohering ſyſtems of matter, the firm coheſion muſt be *between all their poſſible parts*. If it were only between the larger parts, but not between the parts of theſe parts, the diviſion would begin there. If the coheſion were ſuppoſed to be only between particles of the ten thouſandth part of an inch diameter, but not the internal parts of theſe; then we muſt ſuppoſe the whole ſtrength of it to be in the ſurfaces of theſe particles, and that between the leaſt parts of theſe. So that ſtill we muſt lodge the whole force of coheſion, and the firmneſs of the hardeſt bodies *in ſome leaſt parts*, whoſe reſiſtance therefore muſt be millions of times greater than what could ariſe from their ſimple inactivity. And from this again, that remarkable property of matter will follow, which I inſiſt upon, *That its reſiſtance to change its ſtate of reſt, from an extraneous impulſe, is greateſt, where the force of inactivity to remain in that ſtate is the leaſt*. And this I think ſtill is ſuch a firm principle of natural theology, that it ſhows the power of God to be immediately and inceſſantly exerted every where, where there is ſolid ſubſtance: ſince, as Dr. *s'Graveſande* ſays, the hardneſs of the leaſt particles doth not differ from their ſolidity, and is an eſſential property of body. Perhaps there may be an equivocation in the expreſſion (*perfectly hard*) By that cannot be meant ſuch a degree of hardneſs as no force can overcome. The force that binds the particles of matter together may diſſolve them; unleſs we would ſay with *Lucretius*, that no force ever bound them together, which the reaſon juſt now mentioned ſhows to be falſe. But if by *perfectly hard* is underſtood ſuch a degree of coheſion, as no power of man overcome, (which I ſuppoſe is Dr. *s'Graveſande*'s acceptation of the term) the parts of bodies are thus hard. If, in any aſſigned parcel, we could ſeparate all the parts from each other, what would the effect be? We could then deſtroy the ſolidity of matter. By what I ſay concerning the incompreſſibleneſs of water, the very parts of fluids muſt be allowed to have a great degree of unyieldingneſs, that is hardneſs. When fluids are congealed, it ſeems there is only a greater degree of coheſion effected between their little ſolid parts, that were looſe before. Sir *If. Newton* ſays, *All bodies ſeem to be compoſed of hard particles; for otherwiſe fluids would not congeal; as water, oils, vinegar, and ſpirit or oil of vitriol do by freezing; mercury by fumes of lead*, &c. Opt. p. 364. How can any man account for the hardneſs or coheſion of natural bodies, or even of congealed liquors, but by the hardneſs or coheſion of their leaſt parts? If every leaſt part were eaſily ſeparable from every other part, all natural bodies would be infinitely fluid things, though the parts ſtill remained in contact: and every touch would render them diſcontinuous. *Tactus enim lethi ſatis eſſet cauſa profecto.* This makes me ſay, *The conſiſtency of all bodies, our own not excepted, depends upon this conſtant impulſe of coheſion from the firſt Cauſe*. If there were no degree at all of hardneſs in bodies, this infinite fluidity would obtain: and to ſay there are no bodies relatively hard, with reſpect to our ſtrength, is to ſay there are no ſuch bodies as *iron, braſs, ſtone*; or none harder than the parts of our fleſh: for if there be ſuch, they will

XII. Having endeavoured, in as few words as the thing would admit of, to set in a just light the incessant influence of this Being on the material world in

will be relatively hard to us. Nay, if no second agent can separate every least part of matter from every other least part, so as to make it cease to be solid substance; we must say, that those least and inseparable parts are *perfectly hard*; since *perfect or absolute hardness* must be understood with respect to the greatest created power. Hard, or difficultly separable parts with respect to infinite power, is absurd. Thus let us *hunt* and *trace* hardness, either relative or absolute, through all the recesses of matter, we shall always find it lodged in the *last* and *least* parts.

And here if we should consider a little what would happen, if we supposed this impulse of cohesion between the parts of particular bodies suspended; it would appear with fewer words than were used before N° 25. of the last section concerning gravity, that the thus keeping fast bound the several particular substances, on which our life and support depend, no less manifests the goodness, the wisdom, and the wonderful power of God, than the cementing together the great parts of his works by gravitation, by which we are preserved in another respect. *On the one hand*, bodies wanted to be moved. Without motion the world would have been an infinite wilderness. A projectile force is given. This motion would have been in straight lines, unless a centripetal impulse had been every minute impressed. This is constantly supplied. Numberless other species of motions for the growth of animals, vegetables, were required. These are furnished; the various, proper impulses duly made. *But on the other hand*, the parts of the great bodies, and of particular substances, wanted to be variously, strongly bound up in their relative state of rest among themselves. They could have otherwise undergone *no motion, no force*. Resistance implies solidity, solidity cohesion, cohesion impulse: otherwise we might as well speak of the œconomy of a heap of sand, as of an animal body; of the revolution of a cloud of *Epicurus*'s atoms, as of a planet. *This impulse of cohesion then, the ground-work of beauty, order, motion, action, is made variously, minutely, incessantly, universally*; or *in all times, places, different degrees, and according to different exigencies*. Doth not rest as well as motion therefore demonstrate the Creator's amazing, adorable power, presence, goodness! May we not cry out,

Sic, Pater, in cunctos didis te, commodus usus!

Is this speculation unpleasant to the rational nature? or, not founded in reason?

As to what is said of *the agreement of philosophers*; have not some denied any such thing as motion in the universe? some made us mere machines; some denied the existence of all immaterial substance; and some again the possibility of the existence of matter itself. I verily believe they have left nothing undenied that can be a proof of natural theology. Must we wait till they agree, to determine whether we have any material or immaterial substance in us; or perhaps neither of them? Or is it better to let all things remain in sceptical suspence? If this be a reason for doing so now, it will never cease to be one. It is really a better method to follow truth wherever we find it, without regard to names; paying great men that respect which their noble, industrious discoveries justly challenge; yet without sticking close to some weaknesses perhaps, which are inseparable from human nature; or setting *one* great name against *another*.

Sir *Is. Newton*'s thoughts on this subject of cohesion are both pious and philosophical. *All these things being considered*, (says he) *it seems probable to me, that God in the beginning formed matter in solid, massy, hard, impenetrable, moveable particles, of such sizes and figures, and with such other properties, and in such proportion to space, as most conduced to the end for which he formed them; and that these*

in general; let us next (ſtill in conſequence of the ſame principle eſtabliſhed, N° 14 and 15 of ſect. 1.) conſider our own bodies, firſt in their mechanical, and then in their ſpontaneous motions: for albeit in N° 5. of this ſection theſe laſt were only excepted, as not immediately produced by the power of God, yet we ſhall find this exception ſo qualified that his immediate efficiency is as much concerned in theſe, and as neceſſary, as in any other motion whatſoever. In effect, we do little more but *will* the production of the motion; and in ſtrict propriety of ſpeech, he is not only the *firſt*, but the *ſole Mover*. *Animal life, conſiſts in a circulation of fluids, where matter, originally impelled by ſome power,* ab extra, *acts on matter with a certain determined force or moment, which ariſes ſolely from a reſiſtance to a change of its ſtate,* (N° 19. ſect. 1.) *and whatever matter were void of that reſiſtance would be of no uſe in the mechaniſm of an animal body.* For as, on that ſuppoſition, it would have been abſurd to have enquired for a *Mover*, ſince matter making no

theſe primitive particles being ſolids, are incomparably harder than any porous bodies compounded of them: even ſo very hard, as never to wear or break in pieces: no ordinary power being able to divide what God himſelf made one in the firſt creation. While the particles continue entire, they may compoſe bodies of one and the ſame nature and texture in all ages: but ſhould they wear away, or break in pieces, the nature of things depending on them would be changed. Water and earth compoſed of old worn particles, and fragments of particles, would not be of the ſame nature and texture now, with water and earth compoſed of entire particles in the beginning, &c. Now even this way of expreſſing the origin of coheſion is conſiſtent enough with what has been ſaid above: for, ſaying that God created at firſt each of theſe primitive particles *one* and *ſolid*, ſo as to be infrangible by any ſecond cauſe, doth not weaken the demonſtrative evidence they afford us, that an immaterial Power inceſſantly acts in making them cohere, or preſerving each of them *one* and *entire*. For ſtill they are ſolid matter, conſiſting of parts whoſe coheſion wants to be accounted for, (here they are ſuppoſed liable to *wearing* and *breaking*) and it cannot be accounted for in any other manner. And as to their being each of them *one*, and *originally undivided*, lodges no virtue or power in themſelves to remain ſo; ſince Almighty Power might have formed particles of any bulk (millions of times bigger than they) that ſhould have been *originally one* and *undivided*; where the denominations of *unity* and *undividedneſs* could never have ſuperſeded the efficacy and power that hindered their actual diviſion, in undergoing any force, or making any reſiſtance, that was greater than their ſimple *vis inertiæ*. So infinite power might preſerve a *ſtone*, a *mountain*, the whole *earth*, one and undivided, which would only ſhew the effect of this coheſive force the more. The ſubjoining, *But ſhould they wear, or break in pieces, the nature of things depending on them would be changed*, ſeems the ſame as if it were ſaid, *But ſhould God ſuſpend this immaterial impulſe which makes their parts ſtick together, the nature of things depending upon their being preſerved as they are, would be changed.* And indeed this is very certain; for, as from this account we may ſee the power of God conſtantly *working* (to uſe ſuch a familiar word) *here, there*, at the very *centers* of bodies, and through their whole ſolid ſubſtance, throughout all parts of the wide extended univerſe; giving particular bodies their various impulſes, according to their different ſpecific natures: ſo we may eaſily ſee, that ſhould he ſuſpend this impulſe, the foundations of nature would be inſtantly looſed. Things would be no more what

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no resistance to motion, no power or force (that is, the power or force of no being) was necessary to be bestowed on moving it; so it would have been equally absurd to enquire for the effect of such a motion. Had there been but the least particle of resisting matter in a system of such unresisting substance, in a vegetable or animal body, the motion of the whole must have been stopped on coming to contact with that atom.' And as certain as it is, that some matter in our bodies is resisting matter, so certain is it, that any quantity of unresisting matter (not to repeat again the contradiction that there is in supposing such a thing possible) would have been to no purpose, or effect. In short, as was said before, I do not think there ever was stronger evidence for any thing, than that matter must resist: the contrary is not only impossible, but allowing it certain, it is of no imaginable use, either in the works of art or nature. For just as working in stone, wood, iron, or any other material, would have been impossible, since the

they are. *Death* and *horrible confusion* would immediately succeed, where now *life*, *beauty* and *order* are seen. How many ways doth philosophy shew us depending upon him! How quickly could he spread a face of desolation over the universe; obliterate, sink it quite!

Let me here observe from this Author, another argument for an immaterial Mover in the operations of nature, which hath a great affinity with this of the cohesion of matter. He hath from hundreds of instances, I believe, for twenty or thirty pages together (see from *p.* 350. of his *Opticks*) shewn that in chymical experiments the effect is produced, and all the force exerted by the least particles of bodies. Now *that a greater degree of attraction, of repulsion, or a greater effect of any kind, should be exerted by a small atom, than by a much larger body, shews us that this power cannot be lodged in it, but is exhibited by another Agent, by means of it.* For if it were the only immediate cause, its power, resistance, or force of any kind, could only be in proportion to its quantity. And this is directly against being a mechanical effect in another respect; for, as I have observed above, *a small atom can never afford so much scope for other matter to act upon it, as a larger one.* But with submissive respect, and only for the sake of truth, let it be allowed me to oppose the supposition, with which this long detail is introduced. *Have not* (says he) *the small particles of bodies certain powers, virtues, or forces, by which* they act at a distance, *not only upon the rays of light, for reflecting, refracting, and inflecting them, but also upon one another*, for producing a great part of the phænomena of nature? *For it is well known that bodies act one upon another by the attractions of gravitation, magnetism and electricity; and these instances shew the tenor and course of nature, and make it not improbable but that there may be more attractive powers than these*, &c. Nothing can act where it is not: nor therefore matter beyond its terminating surface. Virtue, power, force, cannot be without a subject; nor communicated from the terminating surface of one particle to that of another without a subject. Spheres of activity are material impulse, immaterial power exerted, or nothing: If material impulse; the impelling matter acts, not any distant particle. He adds, *these attractions may be performed by impulse, or some other means unknown.* But if it is not by material impulse, where resisting matter (or matter moved *ab extra*) acts on resisting matter, it must be by immaterial power exerted; since material attraction, that is matter acting at a distance, is repugnant to reason.

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axe would have had *no force* to cut the tree, nor the iron to ſhape and work the ſtone; ſo in the mechaniſm of the animal body, a mountain of ſuch matter would not have moved one reſiſting atom.

XIII. Before we go farther, we may from this obſerve the ignorance, or the diſingenuity of ſceptical people. For it is remarkable that that *very mechaniſm* in the human body, which they contend is the cauſe of ſpontaneous motion in it, or all that is called a ſoul in it, *ſhews to ſatisfaction, not only that itſelf is not this cauſe, but that it is contradictory that matter, or any quality or power, matter can be endued with, can be ſuch a cauſe, as long as the body is capable of this mechaniſm*; that is, as long as the matter in it is ſuch as reſiſts a change of its ſtate, which is the very foundation of mechaniſm (as ſhall be obſerved immediately); and that is again, *as long as it is matter.* There can be no notion more unphiloſophical, than to think that a machine can be made of ſuch matter as doth not reſiſt a change of its ſtate; or if it doth, to think that of itſelf it ſhould effect a change of it. The pretence hitherto hath been, that we do not know all the powers and qualities of matter: but thoſe who would ſeek a refuge from conviction by this, may pleaſe to obſerve, that although we know not all the powers of matter, yet we know certainly that it cannot have *inconſiſtent* and *contradictory* powers; and that, ſince the exciting motion in itſelf depends on this, we are as certain that it is not ſelf-moving, as if we knew every thing belonging to it. Nor yet muſt we forget what was obſerved from Dr. *Clarke* above, that matter is only capable of one negative power, *viz. That every part of it will always and neceſſarily remain in the ſtate of reſt or motion, wherein it at preſent is.*

XIV. This will help us to determine what is properly to be underſtood by mechanical motion, by a machine and mechaniſm, according to the concluſion N° 26. of the laſt ſection; which is neceſſary to be done, in order to ſhew how the divine power produces mechanical motion in our bodies. *By mechanical motion can only be meant motion excited in matter, by other matter in motion, by means of the neceſſary reſiſtance it makes to be brought to reſt.* Nothing elſe can be meant by it without a contradiction; for a particle of matter, that neceſſarily reſiſts a change of its ſtate of motion, cannot produce a change in another particle, that as neceſſarily reſiſts a change of its ſtate of reſt; unleſs it be by a tendency not to change its own ſtate of motion; that is, by reſiſtance to be brought to reſt, or by *moment* in its motion. A particle of matter that can be endued

with no power to change its own ſtate, can yet be leſs endued with power to change the ſtate of another particle; for it muſt act upon it, to overcome its reſiſtance; that is, firſt change its own ſtate, which is contradictory; and it could not act otherwiſe, than by coming to contact, that is, by motion, without being ſuppoſed to act where it is not, which is contradictory ſtill; (ſee the Note (*p*) N° 22. ſect. 1.) What is ſaid here of one particle, is applicable to any number of particles acting mechanically. Any number could only encounter, interfere, impel, as two would do. And then let it be remember'd what hath been ſufficiently ſhewn, N° 11. ſect. 1. and N° 3. of this, that the action of matter upon matter, or of theſe particles among themſelves, can never increaſe motion, but muſt neceſſarily impair it, if their directions are oblique to each other, or interfere ever ſo little; (ſee concerning the encounter of elaſtic particles the Note at N° 3. of this ſection) and therefore that the whole quantity of motion can never be kept up, among any ſort of particles, unleſs where all the directions conſpire, and are never changed, which is never the caſe in mechanical motion. From this conſideration, the following important conſequence, in this kind of motion, is plain. *That a power is not only neceſſary to impreſs the motion at firſt; but that it muſt act inceſſantly, to keep it up to one conſtant pitch.* The force or energy of every ſingle impulſe of this cauſe *ab extra*, is extinguiſhed in whole, or in part, by the action and re-action of the moving particles of the ſyſtem; the laſt always conſuming the firſt, as well as being equal to it: ſo that the motion would ſoon ceaſe altogether, without the indefinent action of the original power. Our experience in machines contrived by the art of man, confirms this. It would be abſurd to think that *one ſingle* impulſe of the ſpring of a watch could keep it going for any time after. The weight muſt *conſtantly* act on the clock. The natural power of gravitation conſiſts in *repeated ſucceſſive impulſes.*

XV. By a machine can only properly be meant *a ſyſtem of matter ſo diſpoſed, that the fixed or immoveable parts of it may direct the motion impreſſed (by the power) on the moveable parts, that it may be by them communicated, to the weight, or thing deſigned to be moved; and that by the apt and proper figures of both kinds of parts, and their right poſition with reſpect to each other.* That it ſhould do more than regulate and direct the moveable parts is ſtill contradictory; for it is the ſame contradiction here, as before, that the fixed parts of it ſhould excite motion in, or increaſe

crease the motion of the moveable parts, impressed upon them by the power; and there is no other way conceivable how it should conduce towards moving the weight, but by the right application of the original force communicated by the *power*; that is, *by regulating the moveable parts*, as has been said. Some machines are so simple, that they are rather to be called *instruments*; and we do not conceive that these multiply or produce motion; but when they become perplexed and complicated, we think it not impossible; or rather we generally suppose it true. However this reason, which is universal, as being drawn from the nature of matter, shews it is our prejudice and inattention. It is true, a *compend* is necessarily studied by us, and always effected in the most useful machines; but this is not by their *multiplying*, or *increasing* the action of the *power*, but by an *artificial application* of it, that as little of it may be lost as can be. We can apply but little power, and therefore must husband it well. Sometimes the *weight* is divided, that but a part of it may affect the *power*, as in some combinations of pulleys; and generally the celerity of it is lessened (of which more by and by); so that what we save in the *power*, we lose in the celerity of the *weight*. But here again, experience confirms this in all machines of human invention; for the force of the *power* must be somewhat greater, even abstracting from friction and cohesion, than the inactivity of the *weight*, in order to move it; which shews that motion is not multiplied *(y)*. If the force of the spring of a watch were but just equal to the friction and inactivity of the parts to be moved by it, there would be an *equilibrium*, and the watch would stand still. That is, the mechanical disposition of the parts, no way conduces to *multiply* the action of the power, but only to *apply* it. The following particular is to be taken notice of carefully in machines, *That the more complicated they are, and the oftener the direction is to be changed* (and in the case of a circulation of particles of matter it is constantly to be changed) *the impressed force must still become the weaker.* This follows from N° 11. sect. 1. and what was said of the motion of the heavenly bodies, N° 6. of this; for if a change of direction weakens the force, a constant change of direction constantly weakens it.

The sceptical account of mechanism, is opposite to this here given in every respect. They suppose a particle may be found in motion, they know not how; but it is without any mover; that motion is not diminish-

(y) It is to be minded here, that force, or moment, is made up both of matter and celerity.

ed, but may be multiplied by the action of particles among themselves; and that there are several inherent, eternal propensities in the particles, to be moved, or rather to move themselves, in certain circumstances. I mark this opposition, that we may bear it in mind. The prejudices of men are generally on the wrong side; but we may readily have recourse to the general principle above, when doubts arise, *viz. That resisting matter cannot move itself, nor unresisting matter any thing else.* This will set us right; for the whole train of reasoning will follow of course.

XVI. From the last two paragraphs we may see that we torment our selves in vain to find out the mechanical cause of the circulation of the blood, if by a mechanical cause we understand certain powers planted in matter, performing this motion, *without the intervention or efficiency of any cause immaterial*; so that matter with these powers planted in it, of itself continues this motion once begun. This is to endeavour to find out a thing which is not to be found out, because it is not. We saw in N° 6. of this, the impossibility of one particle's being carried round in a simple circular motion, without the constant agency of an immaterial Power; but if we apply this to the present case of a circulating fluid, where there is a *congeries* of particles to be carried round, and consider, besides their constant change of direction, the diminution of any impulse impressed, from the action of these particles among themselves, by their *mutual illisions*, *attrition*, *contrary and interfering directions*; and add to this *the irregularity and intricacies* of the *meanders* they move in, differing inconceivably from the simplicity of a circular motion; and lastly, take in the vastly *unequal capacities* of these *channels*, and their *endless divisions* and *branchings*, the impossibility which was shewn in the other case, is infinitely multiplied in this. We saw also just now (N° 14. of this) the necessity of the indefinent action of the *power* upon the *weight*, in any simple machine; but here there is an equal necessity for the indefinent action of an infinity of powers (so to speak): it is not in any one particle, under the same constant circumstances, that the same quantity of motion is to be kept up, as in machines that we know; but in every part of this inconceivably complicated piece of mechanism, under an endless variety of circumstances, where the *power* is to be applied in still a different manner, so that we must conceive them as different powers, and where a difference of the quantity of motion in the same particle, is as necessary to the end proposed, and this difference still to be in number and proportion, as

motion at all is neceſſary (z). If this were to be performed by the agency of finite immaterial Beings, we cannot conceive but that great numbers of them ſhould be conſtantly buſied in maintaining the circulation in one individual animal, conſidering the variety of the work to be done, by different means, in all the different parts of the body, and all to be carried on at the ſame time. The *fin* of a fiſh, or the *toe* of a frog, or *but a part* of theſe, would afford too much employment for a creature that can have but one thing under conſideration at once. What is it to carry it on then, in all animals (and I may add vegetables too) and by a different method and artifice in every ſpecies! Let me here obſerve our unphiloſophical prejudices. If one ſhould ſay, all this is carried on *by nature* at once (meaning by *nature* we know not what, ſome *ſurd imaginary entity*), no body would except againſt the account but think it as good as could be given in philoſophy; but if he ſhould ſay, all was imme-

(z) A ſhort view of this various, intricate, buſy ſcene we may have from *Borelli, part.* 2. *de mot. animal. prop.* 30. after having mentioned two other ſorts of motion in the blood, he adds, *Tertius eſt ille, quo à corde per aortam & reliquas arterias ad omnes corporis partes transfertur diffunditúrque intra carnium, viſcerum & glandularum ſpongioſam ſubſtantiam; & hinc a ſubtiliſſimis venarum canaliculis exugitur, congregatúrque in venas majores, non ſecus ac flumina ex fontibus & aquarum rivulis, & torrentibus in decurſu receptis, augentur; quæ omnes venæ, in unum grandem truncum cavæ deſinentes, tandem ad cordis dextrum ventriculum exoneruntur, & hinc per pulmonarem arteriam moles univerſa ſanguinis, in ipſis pulmonibus diffuſa, iterum recolligitur à venâ pulmonariâ, reducitúrque ad cordis ſiniſtrum ventriculum, ut iterum intra aortam effundatur.* This is not ſo much one, as two circulations; the blood being twice thrown out of, and twice returning to the heart, before the full period is compleated. It takes a long journey, it ſeems, to recruit all the parts of the body, and another ſhorter journey to make itſelf fit for that purpoſe. The heart is the *common office* and rendezvous, whence it ſets out, and whither it returns. What pains (ſpeaking in our manner) doth this work coſt? Infinite Power and Wiſdom, no doubt, might have made it more compendious; ſuch a cauſe is fertile in reſources, being the maſter of all poſſibilities: but art and means are deſignedly multiplied, that we might not take it for the effect of chance. And again, in ſome caſes the method itſelf is different, that we might ſee it is not the effect of ſurd neceſſity. *I ſhall ſtop* (ſays Mr. *Derham, b.* 4. *ch.* 4. of his Phyſico-Theology) *at one prodigious work of nature, and manifeſt contrivance of the Almighty Creator — and that is the circulation of the blood in the fœtus in the womb, ſo different from the method thereof after it is born.* See alſo his note (12) on this place. And generally (nay without exception) in all the works of nature, we can trace the power, the art and deſign a great way, to convince us what kind of a Being the cauſe is: but we can never trace any of them to an end; the farther we go, the art, the means, the contrivance, is infinitely multiplied, till we loſe ſight of it in inexpreſſible ſubtilty, to teach us to admire, adore, where we cannot comprehend. What method could be more proper than this to educate rational beings, to train them up to eternity, to kindle the deſire of intellectual pleaſure in the ſoul!

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diately performed by the God of nature, we ſtraight fly out againſt it, as a thing abſurd and impoſſible. *Nature* in our mouths, is, like *chance* or *fate*, a word that ſtands for our ignorance, or inattention. Is *ſluggiſh matter*, or *ſurd neceſſity* likelieſt to perform the *difficulteſt effects* (ſee the Note *(k)* N° 5. of this). One would think, we ſhould meet with the greateſt oppoſition, if we offered to pervert philoſophy, and teach that *not an intelligent and all-powerful Being*, but a certain thing both void of power and knowledge, did what was moſt wonderful in the Univerſe; and yet the contrary happens. Again, no man would allow, that one ſingle body could of itſelf return to where it ſet out, after a perplexed and various courſe, and run the ſame ten thouſand times an end: and yet we allow that *a multitude* of ſuch bodies may perform this effect! We ſee one ſingle machine requires the conſtant application of an external power; yet we ſuppoſe a vaſtly complicated one, which proportionally diminiſhes the force impreſt, may be a Power to itſelf! But to return; this circulation of the blood is but one, though a principal branch of the animal œconomy; for in the *brain*, *nerves*, *ſtomach*, *guts*, *glands*, in every part there is motion, and every particle receives its immediate impulſe from the finger of almighty God, if this one point be but certain, That matter is ſuch a ſubſtance as reſiſts a change of its ſtate. Shall we yet ſolicitouſly enquire *if there be a mighty Governour of the world; or how we may be certain that he hath power or knowledge; or goodneſs to regard the low eſtate of man? Or where thoſe magnified effects of his power are?* Or is it true *that he works conſtantly near us, round us, within us?*

XVII. Nothing here ſaid is meant as if we ſhould not enquire into the nature and conſtitution of the animal body, and the methods by which motion is effected in it. It brings unſpeakable pleaſure to the mind to underſtand, as far as our faculties will reach, the laws and methods by which infinite wiſdom works; it is uſeful to the relief of our bodies in many caſes; and nothing conduces ſo much to give us right ideas of the power and wiſdom of God, as the contemplation of his works, where theſe perfections appear. But it is meant, *that we ought not to aſcribe the operations of his power and wiſdom to any cauſe beſides himſelf, as to certain virtues and activities in matter, which we know not how it got.* This tends to leſſen our reſpect to him, or make us imagine he may be abſent, while this vicegerent of his power performs all; till at length we incline to think theſe activities may be proper and eſſential to matter; which

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hath been a greater hinderance to our dependance on the Deity, and our regard for him, than any other notion that ever was entertained in the world. When we aſcribe any effect in the animal œconomy to *attraction*, *elaſticity*, *fermentation*, *tonic action*, or *periſtaltic motion*, we either expreſs the efficiency of the firſt Cauſe in terms of art, or aſſert what amounts to a contradiction. Our error in this caſe ſeems to be a fear of *oppreſſing* and *perplexing* the Deity, with the *multiplicity*, or *diverſity* of things to be done; or that theſe things are *too mean* for him to be concerned in; but philoſophy acquaints us better with the nature of an infinitely perfect Being. Or elſe we are afraid not to be artificial enough in our enquiries, or to make an *occult quality* of the Deity; though it is extremely inartificial not to think that we muſt find the origin of the action in him at laſt, proceed as far as we pleaſe *(a)*.

XVIII. Thus

(a) I ſhall here obviate an objection that might be made to this account of the circulation, and generally all motions in the animal œconomy, as being immediately effected by the power of God. *It may be ſaid, that then we muſt conceive him to do and undo, act and counter-act to himſelf:* as for inſtance, if gravity in the blood is his immediate impulſe, and alſo that power (be what it will) whereby it returns in the aſcending veins, contrary to the tendency of gravitation, is his impulſe likewiſe, he muſt be thought to act againſt himſelf. But if this ſcruple ſhould ariſe in any one's mind, it is anſwered, 1. That this is no more an objection againſt *this account*, than againſt the *common one*, where ſome ſecond cauſes or other, ſome certain powers planted in matter, are ſuppoſed to produce the effect; provided we allow, that it is ſtill by the diſpoſition and contrivance of the ſame firſt Cauſe. To diſpoſe a thing to be ſo by mediation, and to effect it ſo immediately, is the ſame as to the conſiſtency of the method. 2. That cannot be called an inconſiſtent method to produce an effect, where the effect is unerringly produced. The exceſs of the one impulſe againſt the other, is preciſely ſuch as anſwers the end. We who have but little power muſt be frugal of it, to make it reach the effect: but the conſequence doth not hold to a Being of infinite power. The neceſſity that all the parts of our bodies ſhould gravitate to the earth, was ſhewn, N° 15. ſect. 1. [Other particular reaſons might be added, with reſpect to the erect poſture of man's body; the ſtate of the brain, ſtomach, guts.] *A general effect*, that cannot admit of being ſuſpended, requires *a general* and *uninterrupted impulſe*; and a *particular exigency* will require a *particular contrary impulſe*. This is as it ſhould be. 3. But chiefly, this very objection ſhews convincingly, what is principally here intended, (and in ſo far anſwers itſelf) *viz. that oppoſite tendencies muſt proceed from external action on matter, and can never be made conſiſtent in the ſame individual ſubſtance.* This objection ſhould have been made in reſpect of many other inſtances; or rather, theſe inſtances ſhould have obliged us long ſince to own an immaterial Power immediately exerted on matter; for theſe contrary impulſes are extremely plain in a drop of oil between two polliſhed glaſs plates making a very ſmall angle at their line of contact. The attraction of *gravity*, or that of *cohesion* (or by whatever name it may be called) may be made to prevail, or both may be made equipollent, as the plates are more or leſs inclined to the horizon. And it is repugnant to ſay *it can have a tendency of itſelf to move two contrary ways at once.*

XVIII. Thus much of the cauſe of motion purely mechanical in our bodies; ſpontaneous motion is not ſo eaſy, and will require more words. The

once. In a thread of ropy liquor ſuſpended, as honey, all the parts are *attracted to the earth* by gravity; and all the parts are *retracted from it* by coheſion: for if the drop at the end falls, the whole thread ſhrinks upward, and is contracted in length. Let any man ſay, whether every part of this *liquid wire* can have a power planted in it to *fall downward*, and an oppoſite power planted in it to *fly upward*, at the ſame time? I ſhewed before an inſtance where the two impulſes coincide (I think) *viz.* of marble lying in the ſtratum; which made me conclude that they proceed both from the ſame cauſe; and that if it was abſurd to offer a mechanical ſolution of the *one*, it muſt be no leſs abſurd to offer any of the *other*: but if we ſuppoſe the thread of honey at the center of the earth, we may imagine the drop at the end would fall no where, but the whole length would be contracted into a globular form, *where the oppoſite impulſes again coincide*, and ſhew (as it appears to me) the *unity* of the cauſe, though producing *different* effects in *different* circumſtances. In this inſtance the oppoſite impulſes are eaſily obſervable; but they are no leſs real in any ſolid body whatſoever ſuſpended, *a rope of flax*, v. g. or a *rod of iron*: every part tends to the earth, and every part tends to that next above it; elſe why do they cohere, and not fall? This contrariety of impulſes (the ſymptom, I think, of their being all external impreſſions) is certain in all bodies moſt familiar to us. A rock, a houſe, a tree; nay our own bodies, and thoſe of all other animals; why do they not ſettle into an horizontal ſurface, like a fluid? It is becauſe the attraction of coheſion hinders that of gravitation to take place. Without this there would be neither *mountain*, nor *height*, nor *deſcent* for rivers, nor *bank*, nor *ſhore*, nor *vegetable* nor *animal bodies*. The conſiſtency of things therefore depends on this contrariety of impulſe on the ſame individual particles of matter: *and a contrariety of impulſe on the ſame individual particles of matter undeniably proceeds from a Cauſe external* to matter.

And here I can't help taking notice of ſome animadverſions that have been made on this account of mechaniſm, contained in theſe five laſt paragraphs, and the neceſſity contended for, of the conſtant action of an external power in all mechanical motion. It hath been obſerved that, *when I ſhew that animals require more than mechaniſm, I ſeem here ſtill to require new laws, and that yet ſome of my arguments are not good, when elaſticity, fermentation, rarefaction from heat, &c. are allowed. That it is not right to diminiſh too far the mechanical part of the contrivance and conduct of the fabrick of the Univerſe; that if I bring in too many laws and principles actuating and governing the motions in it, it has great diſadvantages; and that when a moſt number of different laws, often claſhing, appear in my ſcheme, it will revolt ſome againſt it. That it muſt be remembred that the imputing the motions of animals in a great meaſure to a fine machinery is ſo far from derogating from the power and wiſdom of God, that from hence ariſes the beſt demonſtration of it. That though the principles of gravity, elaſticity, &c. were mechanical themſelves, yet the forming and producing ſuch machines from theſe principles, ſhews the higheſt art; and that we are not to leſſen an argument, eſpecially one ſo clear and obvious to the ſenſe of all mankind, for the ſake of another that requires fathoming the depths of philoſophy, perhaps farther than any man has yet arrived before it can be admitted.* Here I cannot help replying in general, that if any, without obſerving the reaſons I give, or excepting againſt them, will refuſe the conſequences that follow from them, there is no guarding againſt ſuch objections. I ſhew (N° 14 and 15. ſect. 1) that if matter neceſſarily reſiſt a change of its ſtate of reſt or motion, it cannot have any power or virtue

The firſt thing obſervable in it is, *that it doth not exclude, but ſuppoſe mechanical motion.* The *ſpontaneity* conſiſts in ſetting the mechaniſm at work:

virtue planted in it, or made inherent in it, as in a ſubject, to change that ſtate. To be utterly incapable of producing an effect *at all times*, and yet capable of producing the ſame effect *at ſome times*, the incapacity ſtill ſubſiſting, is undoubtedly a direct contradiction. And after that, N° 26 and 27. I ſhew that matter, as matter, muſt neceſſarily reſiſt all change of the ſtate it is in; or that the incapacity of effecting a change in itſelf, is inſeparable from it as a ſolid ſubſtance. Not to mention what hath been alſo ſhewn, that if we ſhould deny this reſiſtance of matter; by ſo doing we allow a contrary incapacity in it, for want of *reſiſtance*, *force*, or *moment*, to act on other matter. (See N° 22. and the note *(p)*. Theſe particulars being conſidered, no principle in natural philoſophy, I think, is more certain, or better eſtabliſhed. Now from this principle follow eaſily all the ſeveral conſequences that I have drawn, or ſhall draw. How can it be ſaid then *that I bring in new laws ſtill; or multiply principles; or that a vaſt number of different laws appear often claſhing in my ſcheme*, as it is called (though it is more juſtly *Kepler*'s ſcheme, or even before him perhaps *Pythagoras*'s?) Let it be ſhewn me, how the fair conſequences of the ſame principle can differ, or appear claſhing with each other? It is true, ſuch a fundamental principle cannot take place, without drawing a great many particular conſequences after it: but why ſhould this ſhock any of my readers, as it hath been ſaid before it will do? This is rather as it ſhould be. If one ſhould diſcover a new property of ſome geometrical figure, the conſequences of it would never ſhock a mathematician. This is neither *Kepler*'s fault, who firſt diſcovered this univerſal property of matter, (nor perhaps *Pythagoras*'s before him) nor Dr. *Clarke*'s, who firſt inſiſted on theſe conſequences of it: nay let me venture to ſay, the prejudices of men ſhould rather give way to it, if it be true; and the commonly received opinions, ſo far as they are built on theſe prejudices, ſhould be corrected.

If indeed *elaſticity*, *fermentation*, *rarefaction from heat*, &c. are allowed in the common ſenſe of them, as powers, to wit, lodged in matter, none of my arguments are good. But they cannot be allowed in that ſenſe, while the property of inactivity, or the *vis inertiæ* remains, *which hath been ſhewn eſſential to it as matter*. Having firſt premiſed, that ſpontaneous motion itſelf doth not exclude, but ſuppoſe mechanical motion, as the baſis and ground-work of it; let me obſerve, that even Sir *Iſ. Newton* ſeems inclined to apply the elaſtic medium, which he ſuppoſes the cauſe of gravity, to ſolve this appearance of animal motion: which ſhews that he did not think the motive force was lodged in any matter that belonged to the body, or was exerted by it. His words are, *Is not animal motion performed by the vibrations of this medium, excited in the brain by the power of the will, and propagated from thence through the ſolid, pellucid, and uniform capillamenta of the nerves into the muſcles, for contracting and dilating them?* (Opt. p. 328.) Thus far then we have his authority for rejecting the powers of matter in this caſe, as they are commonly underſtood; and really in all caſes to which he applies the agency of this elaſtic fluid. He doth not lodge a motive power in the *fine machinery* of the body, but calls in a *foreign Mover*, in ſubordination at leaſt to the power of the will: but what is to be done in mechanical motions which are independent on the will? How the particles of this fluid come by their activity or motion, he no where inſinuates. Upon which account, I think, the queſtion concerning *the origin of motive power* (the weightieſt certainly in natural philoſophy) is left ſtill undetermined. Indeed if we conſider that we have the ſame arguments againſt the activity of the matter of this

work: we are free to excite motion in the hand, or foot, or not to excite it; but we are not free to excite it with, or without the help of mechaniſm;

fluid, as we have againſt the activity of any matter; it appears we ſhould reject the active powers of matter univerſally: for, allowing the exiſtence of ſuch matter, it can itſelf be but a thing moved, juſt as a billiard ball is a thing moved, though it moves another ball.

As to what is ſaid, *that it is not right to diminiſh too far the mechanical part of the contrivance and conduct of the fabrick of the Univerſe:* I muſt obſerve that the mechanical part, ſo far as regards the nice ſtructure and contrivance of an animal or vegetable body, or the diſpoſition of the material Univerſe in general, is no way diminiſhed in this account: all the infinitely nice adjuſtment of one thing or part to another, ſtill remains as it was: all the wiſe ordering of *proper means* to attain every *end*, is as conſpicuous after what is advanced here is allowed, as it would be otherwiſe. Let me ask: Is not the contrivance of the ſeveral parts of a watch, in order to ſhew the hour by the turning of the index, ſtill as artificial and ingenious, though one aſſerts that the elaſticity of the ſpring is no power planted in dead matter, but a conſtant impulſe *ab extra*; as it would be otherwiſe? There is certainly no difference, nor any thing to make an alteration; and the caſes are juſt alike. But we would have the motive power itſelf planted in dead matter; that is, *dead matter to be living matter*, (for ſuch I think it is to be ſelf-movent) to anſwer our notion of mechanical contrivance. Let us look into any book of anatomy, or natural philoſophy, where the skill and knowledge of mechanical contrivance is explained, and we ſhall not find that the particular inſtances alledged are intended to ſhew whence the origin of motion is; or *that a fine machinery may be a power to itſelf:* but only to ſhew the wiſdom and skill that is manifeſted in fitting the ſeveral parts to comply with ſuch and ſuch motions, their advantageous poſition, number, ſtructure, ſtrength, with all thoſe other particulars that adapt them to their proper ends. Thus it is obſerved that the ſtructure of the back-bone is the very beſt that could have been contrived; if it had been one continued bone, we could not have bended our bodies; if there had been but two or three bones with articulations for motion, the ſpinal marrow would have been bruiſed at theſe angles or joints. Again, it is obſerved in the joints, that ſome are *furrowed* and *ridged*, where the motion is deſigned to be ſtraight *forward* or *backward* only; ſome are like a *ball* and *ſocket*, that the motion may be *quaquaverſum*; both which artifices human art hath copied. Now in theſe and all other ſuch inſtances, doth any thing ſaid here diminiſh the mechanical part of the contrivance? They have all the ſame marks of wiſdom and deſign in them whenceſoever the motive impulſe proceeds. But that it ſhould proceed from the dead parts of matter, or be lodged in them, this I deny. And as it appears in reaſon the trueſt account that the motive impulſe ſhould proceed from the *firſt Mover*; ſo it hath theſe conſequent advantages, that it is the *ſimpleſt* and *plaineſt* of all other, makes more for the *beauty of the Univerſe*, the *advancement of natural religion*, the *univerſality of Providence*, and the *ſhewing the ubiquitary preſence of the Deity*, than any other could. Would philoſophy be the richer, if it could diſcover one mechanical cauſe above another, for a great way, and there ſtop, without carrying us farther? Let me be forgiven, if I ſuſpect, that theſe are only the miſtaken views we generally propoſe to ourſelves. And if it was deſigned to lead us to a firſt Mover at all, can it be ſo plain and ſimple to ſuppoſe him moving one thing, that moves another thing, and ſo on, that moves the things we are acquainted with? It is to be obſerved, that from the action of matter upon matter, the quantity of motion is ſtill decaying in the Univerſe; and then the more mechanical

chaniſm ; if it is begun ſpontaneouſly, it is yet executed or performed mechanically. The body is a machine, and that extremely complicated ; or

chanical cauſes it is communicated through, the firſt impreſſed force muſt be the more weakened, unleſs we would employ Omnipotence to impreſs the motion at a vaſt diſtance, and then to keep it up in every ſtep of the gradation downward. In this very reſpect of animal mechaniſm, Sir *Iſ. Newton* is very expreſs that there muſt be ſome *active* and *recruiting principles* to keep the heart and blood of animals in perpetual motion, and to repair the loſs of it in all other things. His words are, *Seeing therefore the variety of motion which we find in the world is always decreaſing, there is a neceſſity of conſerving and recruiting it by active principles, ſuch as are the cauſe of gravity, by which planets and comets keep their motions in their orbs ; and the cauſe of fermentation, by which the heart and blood of animals are kept in perpetual motion and heat ; the inward parts of the earth are conſtantly warmed, and in ſome places grow very hot ; bodies burn and ſhine, mountains take fire, the caverns of the earth are blown up, and the ſun continues violently hot and lucid, and warms all things by his light. For we meet with very little motion in the world beſides what is owing to theſe active principles. And if it were not for theſe principles, the bodies of the earth, planets, comets, ſun, and all things in them would grow cold and freeze, and become inactive maſſes ; and all putrefaction, generation, vegetation, and life would ceaſe, and the planets and comets would not remain in their orbs.* (Opt. p. 375.)

Here there is a full enumeration of all the particulars that are inſiſted upon throughout this whole ſection ; and the mechaniſm of all the parts of the world, ſmall or great is very plainly ſuppoſed inſufficient to keep them a going, or afford motive power, without *active principles*, proceed they whence they will. And as to his way of explaining this in the next page, where he ſays, *It ſeems to me farther, that theſe particles have not only a* vis inertiæ, *accompanied with ſuch paſſive laws of motion as naturally reſult from that force, but alſo that they are moved by certain active principles, ſuch as is that of gravity, and that which cauſes fermentation and the cohesion of bodies.* As to this, I ſay, if it is meant that theſe inert particles are endued with ſuch active principles, ſo as to become the *ſubjects* of ſuch *inherent activities*, I am forced directly to deny it. They muſt be *diveſted* of their inertia, before they can be *endued* with activity : and if their inertia is *inſeparable* from them, activity will be utterly *incompetent* to them. An *inert*, active particle of matter is too open a contradiction to allow of diſpute. The *inertneſs* ſignifies an *inability* to change its ſtate of reſt or motion : and the *activity* ſignifies an *ability* to change that ſtate. But though Sir *Iſ. Newton* ſays, that theſe particles have not only a *vis inertiæ* ; yet he doth not ſay, that *they move themſelves, but that they are moved by certain active principles :* and when it is ſaid that a thing is moved, in oppoſition to ſaying it moves itſelf, it muſt neceſſarily be underſtood that it is moved by another thing not itſelf. Now go as far as we pleaſe, to other and other particles of matter, as long as they are allowed to have a *vis inertiæ*, theſe can never be thoſe active principles : which ſhews all at once whence the power and activity muſt proceed. With ſubmiſſion, I think it is ſomewhat improper to ſpeak of the *mechanical cauſe of active principles*, (ſee what is ſaid p. 377, about leaving the cauſe of theſe principles to be diſcovered) or the mechanical cauſe of thoſe principles that conſerve and recruit motion in the univerſe. And if the immechanical cauſe of them is there meant, we cannot be ignorant whence all power and activity proceeds, as I ſaid above.

or every part of it is full of various machinery, previous to our will, and by the appointment of the *Author* of it; so that, though it depends upon the will to produce motion, or not, in any part of it; yet if any part of it is moved, as being the part of a machine, it must be mechanically. The case is the same as when we would raise a weight by a pully or lever, or work a pump; it depends upon us to raise the weight, or not, by that means; *but not to raise it without that means.* There only arises this difference, from the simplicity of mechanism of human invention, and the complication of machinery in the body, that to move a part of any other machine, we must generally work the whole; whereas we can move a part of the body without moving or working all the other parts of it. *This was wisely and kindly so instituted by God, to answer the variety of our necessities, and prevent our universal and constant fatigue.* What is here asserted, is plain from this, that though motion is excited in the body by the empire of the will (*b*); yet more is required to excite.

Upon the whole then, to shew the origin of motive power in the Universe, to repair the waste of constantly decaying motion, and preserve life, heat and vegetation, is really the *dignus vindice nodus*, that calls for the intervention of the *first Cause*; since to account for the natural powers of matter from other matter, is not to the purpose, here at least.

As to what is said, *that the imputing the motions of animals in a great measure to a fine machinery, is so far from derogating from the power and wisdom of God, that from hence arises the best demonstration of it:* I answer, the resolving motion into machinery hath been the atheistical and sceptical refuge ever since *Democritus*'s and *Epicurus*'s days, who allowed of no immaterial substance to be the cause of it; and it is the chief thing they will ever have recourse to, against the arguments for the power and wisdom of God. The fine machinery and contrivance of the parts of the bodies of animals, in order to perform the motions proper to their species, and way of life, is certainly one of the best arguments of the power and wisdom of God: but *that the imputing the motions themselves to this can be any argument for these*, I cannot agree. The direct impossibility of the thing itself is shewn above, N° 13. which ought to be remember'd here.

As to the next point, there are demonstrative reasons against the principles of gravity, elasticity, *&c.* being mechanical themselves, and it would be ill shewing the skill of the Deity from such topics. When it is said *that the imputing the motions of animals in a great measure to a fine machinery, is an argument so clear and obvious to the sense of all mankind*; it is certainly mistaken, I think, for the wise structure and excellent disposition of the parts, to comply with all motions for the animal's preservation and life; which is certainly an obvious and clear argument, but is no way lessened in this account of the origin of the motions themselves. And the trouble of *fathoming the depths of philosophy* does not lie on my side, but on theirs who *impute animal motion to fine machinery.*

(*b*) *Quod multiplices, & plurimæ animalis motiones fiant electione, seu naturali appetitu quodam animalis; hoc quoque ut evidentissimum ab omnibus admittitur.* Borel. de mot. animal. part. 1. c. 1.

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it, than ſimply to will it (*c*): nor can the will, by virtue of its command, produce motion in any part or limb of the body, if the *machine* deſtined by nature to effectuate that motion, and to be the *inſtrument* in executing that command, be defective or diſordered. Thus if the muſcle, or muſcles, deſigned to be the inſtruments in moving any joint, be cut tranſverſly, or any other way diſabled from their function, the will may command with all imaginable intenſeneſs, yet will no motion of the joint enſue (*d*). And this ineptitude of the mechanical inſtruments of motion, is the cauſe of the imperfection of ſpontaneous motion in *infants*, *decrepit old people*, and *wounded men:* for all on the part of the will may be equally diſpoſed then, as at other times. And indeed the common ſenſe of mankind doth not allow, or imagine it poſſible, that diſeaſe or age affects the will, or weakens the intenſity of our deſires. We are ſubject to no depredations of time, no decays, in that reſpect; and were there no other thing required to the production of motion, but to will the production of it, ſpontaneous motion would be always as the intenſity of the deſires, nor would the aptitude of the body be conſidered in producing the effect. This is ſtill farther evident in *reſpiration*, which is a motion purely mechanical in us; for it is performed neceſſarily, and without an act of the will, as well when aſleep as awake. Yet it is alſo partly ſubjected to the will; we can *accelerate*, *retard*, or *entirely ſtop* it for a little. And ſurely when it is thus accelerated, in conſequence of an act of the will, it is no otherwiſe performed than when the will is not concerned in it; *that is mechanically*. Whence, as was aſſerted, *ſpontaneous motion doth not exclude, but ſuppoſe mechanical motion; and the ſpontaneity conſiſts only in ſetting, or not ſetting the mechaniſm on work*; or in an arbitrary command over the mechaniſm.

XIX. Now *this thing* that *begins* motion where it was not, and *ſtops* it where it was; that effects a change from reſt to motion, and from mo-

(*c*) *Manifeſtum quoque eſt cognitionem & appetitum per ſe tantum animalis partes non movere, & impellere, ſed opus habere inſtrumentis neceſſariis, ſine quibus motus effici nequeunt.* Ibid. And a little below; *At hæc doctrina* [*Ariſtotle*'s opinion, that the ſpirits were the inſtruments that move the bones] *rejicitur à Galeno, & ob omnibus aliis, & ab ipsâ ſensûs evidentiâ, qua conſtat muſculos eſſe organa, & machinas, quibus facultas animæ motiva articulos & partes animalis movet.*

(*d*) *Jam diu hoc confirmatum eſt, quia ſectis per tranſverſum muſculis, ceſſat omnis retractio illius articuli, ad cujus confinium muſculus alligatus fuerat, remanente interim illæsâ actione ejuſdem articuli, quæ ab aliis muſculis ibidem definentibus pendet.* Ibid.

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tion to reſt; and that arbitrarily, can never be matter, which, as hath been ſhewn, neceſſarily reſiſts all change of its ſtate, either of reſt or motion. This would be a thing as ſelf-deſtructive and repugnant as any that can be aſſigned; for the properties of the one of theſe, are directly oppoſite to thoſe of the other. Though ſpontaneous motion ſuppoſes the mechanical performance of it; yet ſince it hath been ſhewn, N° 14, 15 and 16, that mechanical motion neceſſarily ſuppoſes an *extraneous immaterial Power*; and ſince, in the preſent caſe, *even this mechanical Power* is ſubject to the *ſpontaneous principle*, to ſet it at work, or ſtop it, and that in a very arbitrary manner; it can leſs be contended that *this principle* is matter, or any power poſſible to be planted in matter, than that the mechanical power itſelf is matter, or any power poſſible to be planted in matter *(e)*. To aſſert this, would be as if we ſhould ſay, that matter, which, as a ſolid, extended ſubſtance, would imply a contradiction to be endued with any power to change its preſent ſtate, and therefore ſtands in need of an external power to effect all change of ſtate in it, is yet in certain caſes (of ſpontaneous motion, to wit) endued with a power over this *extraneous immaterial power*, to impel and ſet it a work to produce a change in itſelf. Or, that matter hath the power over *that* which hath the power over *it*; which is fooliſhly contradictory. In ſhort, the caſe is juſt the ſame as when a man works any machine, a pump, for inſtance, to bring up the water: the gravity of the atmoſphere, which, as hath been proved, is no power reſiding in matter, but a conſtant impulſe *ab extra*, is neceſſary to make the machine produce its effect; and all that the man doth, is to put the machine in ſuch a diſpoſition, as to give this extraneous principle *ſcope* to act. Here *two diſtinct principles* are neceſſary; the *gravitation* of the incumbent atmoſphere, and the *living force* of the man, applied to diſpoſe the machine ſo as that this gravitation may have room to be exerted. Juſt ſo, the *ſpontaneous principle*, by its action, gives ſcope to a *foreign power* to be exerted in the ſubſtance of the

(e) This gives a particular ſanction to the proof of the immateriality of the ſoul of man; and (if I might ſay ſo) puts it one remove farther, in our way of reaſoning, from being material, than the firſt Cauſe himſelf. And indeed it is generally allowed (though I do not ſay juſtly) that ſpontaneous motion is far more impoſſible to be found in mere matter, than that of gravity, elaſticity, and other impreſſions which have been ſhewn to be immediately derived from Him.

muſcles

muſcles (by rarefaction, or ebullition, perhaps) (*f*) and produce the effect: ſo that here alſo *two diſtinct immaterial principles* are neceſſary to produce the motion, without either of which it would not be produced; ſo far is it from being true that none is neceſſary. And it is as abſurd to ſay, that the *ſpontaneous principle* is nothing but the ſubtil matter, which by its action it conveys into the ſubſtance of the muſcle deſtined to be the inſtrument of the deſigned motion, as it would be to ſay, that the *living force* applied (by the man) to the *rod* or *winch* of the pump, is nothing different from that winch or handle. Therefore I conclude, as was ſaid juſt now, *that this thing, which thus arbitrarily effects a change of the preſent ſtate of reſt or motion in the matter of the body, cannot be the matter of the body itſelf, which neceſſarily ſtruggles againſt all change of its preſent ſtate.* And ſince this change is effected by *willing*; for ſpontaneous and voluntary motion is the ſame thing; *that thing which wills in us, is not matter.* And ſince willing is but a power, or property, which cannot ſubſiſt by itſelf, without a ſubject, or ſomething of which it is the power (*cujus eſſe eſt ineſſe*); therefore I conclude, *that the thing which wills in us is an immaterial Being or Subſtance.* Of the other properties contained in the deſcription of the human ſoul, N° 1. ſect. 1. we ſhall ſee preſently.

XX. Thus it appears there are two diſtinct immaterial Beings which produce motion in the matter of the body: that Being which is the *principle* of ſpontaneous motion; and *that other Being* which is alone the *cauſe* or *power* in circulation, reſpiration, and other motions not ſpontaneous, and a *coefficient Cauſe* even in ſpontaneous motion; which actuates all matter, and from whoſe immediate impreſſions gravity, elaſticity, coheſion, *&c.* reſult. Theſe are two diſtinct Beings, I ſay; for that Being which by the mandate of its will excites ſpontaneous motion in the body, hath no power over the circulation, either to promote or impede it; it often doth not know whether there is any ſuch motion

(*f*) See *Borelli de mot. animal. part* 2. *c.* 3. *De cauſis probabilibus vitalis contractionis muſculorum*; where he ſays, (*prop.* 24.) that the *ſuccus nerveus* inſtilled into the muſcle, by the act of the will, is one probable cauſe; and (*prop.* 26.) the blood contained in the ſubſtance of the muſcle, the other, of the fermentation, intumeſcence, and contraction of the muſcle: and that (*prop.* 27.) the method of this ebullition is not different from common fermentation: and in *prop.* 25. that the ſoul acquires *by habit* the art of tranſmitting the animal ſpirits rather into one nerve than another, according to the part that is to be moved,

in the body; and when this motion is out of order, that Being can do nothing towards rectifying it again; and it hath but a very limited power over the reſpiration, which is performed without its concurrence, and even in oppoſition to it; for it cannot ſuſpend this motion for any conſiderable time. *And a Being can never be the cauſe of ſuch an effect as it doth not concur to produce, and which will be produced, in ſpite of all its endeavours to hinder it.* And though in ſpontaneous motion it is *arbitrary*, and the firſt Cauſe; yet the concurrence of the *other Cauſe* is abſolutely neceſſary. If the mechanic organs of motion (which do not depend on it for their right diſpoſition) be out of order, as was ſaid N° 18. or if the immaterial Cauſe, which is the *power* in all mechanic motion, do not *co-operate*, no ſpontaneous motion will be produced; but an unperforming act of the *will* will paſs without any effect. *Therefore* theſe two are diſtinct immaterial Beings, and not the ſame immaterial Being.

XXI. There are two things very remarkable here, and worth being taken notice of, as lying in our way, *viz.* that in this proof of the immateriality of the human ſoul, or of the neceſſity of *a particular immaterial Cauſe* in the production of ſpontaneous motion, the argument as ſtrongly infers the cauſation, concurrence, or co-operation of the *firſt* and *univerſal Cauſe*, as of this ſecondary immaterial Being: And this is a right ſymptom, and perfectly as it ſhould be, according to the nature of that *univerſal Cauſe*. But that which is aſtoniſhing in this appearance of ſpontaneous motion is, *That he ſhould ſubmit his infinite power to co-operate with the will of his creatures.* And as there is no avoiding this *concluſion* in right philoſophy (g), ſo we cannot but admire this inſtance of the divine condeſcenſion.

XXII.

(g) What is here mentioned of the firſt Agent's ſubmitting his infinite power to co-operate with the will of man, is no more than what appeared in N° 19. in the parallel caſe there ſpoken of, of a man working a pump. For whether gravitation, (that of the atmoſphere, which there produces the effect, when the man, by voluntary motion, diſpoſes the machine ſo, that this power hath ſcope to act) whether this gravitation, I ſay, is the immediate impulſe of the firſt Agent, or the impulſe of other matter, which muſt be firſt impelled by him, (unleſs we would exclude his agency altogether, and ſuppoſe an infinite ſeries of neceſſary cauſes;) ſtill, in this caſe, his infinite power, by the method and law he hath eſtabliſhed in created nature, is ſubjected by him to co-operate with the action of his ſpontaneous creatures. And the ſame is to be ſaid in all other caſes, where the natural powers of matter, as they are called, are exerted in

XXII. However this conſideration ſeems to require that we ſhould dwell a little longer on the concurrence of the firſt Cauſe with the ſpontaneous mover of the body; to ſee if it may not appear by another method of reaſoning than that in N° 18. Now if we ſay that no extraneous power concurs, and aſſiſts the ſpontaneous principle to excite motion in the body, we muſt ſay that the whole force exerted, is impreſſed by it immediately *on the firſt moved part*; or rather, (ſince the motion is communicated through a ſeries of inert organs, which by *reaction* conſume much of the firſt *action*, N° 3 and 14.) that much greater force is firſt impreſſed, than is ultimately exerted on the thing to be moved. For it is moved immediately by *ſomething* that doth not communicate all the motion it receives, and that by *another thing*, &c. until we come to the *thing firſt moved*. But this firſt moved part (*animal ſpirits*, or *ſuccus nerveus*, or give it what other name we pleaſe) though it is abſolutely certain that it muſt be matter, ſince, by the terms, it is a thing moved (*h*) and, by ſuppoſition, moves other matter by material impreſſion; muſt yet be very ſubtil matter, and in a very ſmall quantity, otherwiſe its nature, properties, and manner of operation had been better known before now (*i*). If then we conſider the quantity of matter to be moved by the force impreſſed on this firſt part alone (no other force concurring by the ſuppoſition) which is often more than double the matter of the whole body, in caſes where a foreign weight is alſo to be moved, and that this part which receives the whole impreſſion is ſo minute and ſubtil; it follows that the quantity of matter in it bears ſcarce

conſequence of any action of ours; as in ſhooting a bow, moving a ſpring, &c. So that this concluſion is to be made on any ſuppoſition, but that of direct Atheiſm; which I beg leave to obſerve ſhews the juſtneſs of that reaſoning which inſers it here. This is that which was referred to N° 5. note (*k*).

(*h*) *Quia omnes muſculi, paucis exceptis, non agunt vitali motu, niſi quando volumus, & imperio voluntatis à cerebro, quæ eſt regia animæ ſenſitivæ; non tranſmittitur per alias vias, quam per nervos, ut omnes fatentur, & evidentiſſimæ experientiæ evincunt: cùmque præterea rejecta ſit actio incorporeæ facultatis, & ſpirituum aërcorum; ergo neceſſe eſt ut aliqua ſubſtantia corporea, per nervos ad muſculos tranſmittatur, vel commotio ab eâ communicetur, quæ poſſit validiſſimam inflationem illa oculi efficere.* Borell. de mot. animal. Part 2. Prop. 22.

(*i*) *Fateor me non percipere mechanicam operationem, quâ motus ſpirituum in cerebro imperio voluntatis agitati, eos dirigant ad titillandos certos & determinatos muſculos, ut, ſi velim manum extendere, ſpiritus dirigantur non ad nervos pedum, aut thoracis, ſed ferantur ad eos qui ad manus pertingunt, ut eos titillent. At ſi balbutiendo aliquid loqui velimus, puto, &c.* Ibid. Prop. 25.

any proportion to that of the matter to be moved by it; and if we should suppose (which is the only thing to be supposed, to render the effect possible) *that their quantities of matter and velocities were reciprocally proportional* (that is, that it as much exceeded the matter to be moved in velocity, as it is less in quantity) to render their forces but barely equal; then it follows that the velocity of *this part* would be so inconceivably great, that it would perforate any part of the body, opposing its direction, like a ball out of a gun, and so leave the body quite, without performing the designed effect. *Borelli* calculates that when a man extends his arm, and upon the extremity of his four fingers supports as great a weight as he can in that posture, the force that is exerted in the muscles to support this weight, is more than seventy thousand times greater than the weight itself, whatever this is (*k*). But it is impossible that a force equal to this could be directly impressed on a part, that almost escapes observation, without having the effect just now mentioned. Whence it is evident, *That all the force is not impressed on the first moved parts* (animal Spirits, v. g.) ; *and that all that it doth is only to give scope to a far greater power to be exerted*; *and that this immaterial power is exerted in subordination to the will, or co-operates with it.*

XXIII. This Author, who was the first that discovered that the force exerted within the body so enormously exceeds the weight to be moved without; or that nature employs an immense power to move a small weight, says thus of it; Part 2. c. 3. *De gradu virtutis motivæ vitalis musculorum secundùm Antiquos. Hæc communis sententia* [the opinion of *Galen*, *Gassendus*, and others, to wit, That nature moves great weights by small powers] *tantum verisimilitudinem & probabilitatem in se habere videtur, ut mirum non sit, à nemine, quod sciam, in dubium fuisse revocatam. Quis enim tam stultus erit, ut machinam unquam quærat, ut magnâ vi pusillum pondus moveat, scilicet machinam & artificium adhibeat, non ut compendium, sed ut dispendium virium patiatur? Non secus ac si quis pondus unius libræ, quod immediatè absque ullâ machinâ movere atque sublevare posset vi, & robore æquali uni libræ, neglecto compendio, quæreret vectes, trochleas, & alia organa, ut libram unam sublevaret viribus decies & centies majoribus. Et si hoc absurdum jure censetur, qui fieri poterit ut natura sapientissima, quæ ubique compendia, simplicitatem, & facilitatem quærit, tantâ industriâ ma-*

(*k*) *Idem*, Part 1. Prop. 45, 82 & 124.

chinas

chinas in organis animalis elaboravit, non ut parvâ virtute magna pondera, ſed è contra immenſo propemodum robore parva pondera moveat? Hoc quidem licet videatur monſtrum, & contra communem ſententiam, non diffiteor me poſſe evidentiſſimè demonſtrare, & petitâ priùs veniâ, oſtendere contrariæ ſententiæ aſſertores allucinatos fuiſſe. Demonſtrabo enim verè machinas in motionibus animalis adhiberi, & illas multiplices, & varias eſſe; attamen non parvâ virtute magna pondera ſublevari, ſed è contra magnâ virtute, & robore facultatis animalis parva pondera ſuſtineri; ita ut multoties virtus motiva centies & millies ſuperet pondus oſſium & articulorum ſublevatorum, & nunquam minor ſit illis; & hoc erit præcipuum hujus primæ partis ſubjectum & materia. Thus far this excellent perſon in his entrance upon this ſurpriſing affair. And whatever may have been objected againſt his calculation of the force of the heart, or other particulars (*l*); yet it is obvious that in the main, it is as he aſſerts with reſpect to ſpontaneous motion; *viz.* that nature employs a vaſtly great force to move or ſuſpend a ſmall weight, and there is a neceſſity in the nature of things that it ſhould be ſo. For the *Power* that moves the limbs in this motion is confined to *narrow bounds*: or hath but a *ſmall room* to act in; and the *weight* to be moved (the limb or part, and it may be a foreign weight joined to it, as when we throw a ſtone with our hand, or ſupport a weight with our extended arm) moves through *a much larger ſpace.* Therefore the *power* muſt be as much *greater* than the *weight*, as its diſtance from the center of motion is *leſs.* The wiſdom of God and his power ſhines out wonderfully in this. The animal body was to be but of a moderate ſize; the power was neceſſarily confined to act within it; and the weight was as neceſſarily to be moved without it, in all motions. Therefore a great profuſion of power and force was requiſite to move ſmall weights. And ſince a contrary diſpoſition of things (where the power, to wit, ſhould have acted in a larger ſphere, and the weight moved in leſſer room) was inconceivable; we ſee the power of God was not ſtraightned, but hath laid out an immenſity of force to produce

(*l*) Dr. *James Keil*, it is true, hath as good as demonſtrated that M. *Borelli* is wrong in calculating the force of the muſcle of the heart; and M. *Varignon* hath diſcovered another miſtake of his. Yet it is but juſtice to ſet down what this laſt named Author ſays of him —— *Au reſte* (ſays he) *ſi l'on attaque une erreur ou M. Borelli eſt tombé, on n'en eſt pas moins perſuadé du mérite extraordinaire de ce grand homme, dont les principaux ouvrages doivent être mis au nombre des livres les plus originaux qui ayent paru dans ſiécle ci. Avvertiſſement au l'examen de l'opinion de M. Borelli ſur les proprietez de poids ſuſpendus par des cordes.*

the effect; which ſeems indeed an extravagant expence of power to us, whoſe weakneſs forces us to have recourſe to a quite contrary method. For we are obliged to give the *little power* we can employ *a large ſphere of action*, that the weight may be moved *a ſmall ſpace*. The wiſdom of God diſplays itſelf alſo wonderfully, in chuſing the proper kind of power (ſpeaking according to our conception) ſo as to require the leaſt ſphere of action poſſible: for an inſtantaneous fermentation is kindled up in the body of the muſcle, where a force is exerted like to that of gun-powder: *Quæ poſſit validiſſimam inflationem ictu oculi efficere*, ſays *Borelli (m)*. Let me be permitted

(m) The following animadverſion hath been made with reſpect to what is ſaid here. "As for "the cauſe of the contraction of the muſcles in animal motion, that ſeems one of the moſt ab- "ſtruſe phænomena in nature, and moſt diſputed at preſent. An ingenious writer has refuted "the more common opinion, without giving any diſtinct account of his own. There is ſo "much reaſon to be cautious in natural philoſophy, and ſlow in giving into any hypotheſis, "and the experience of many ages has ſhewed this ſo neceſſary, that it is by modeſty and "great care in reaſoning about the hidden cauſes of theſe manifeſt phænomena that one will "be heard upon them" But with much ſubmiſſion, though the formal manner of muſcular motion is ſtill diſputed by Philoſophers, all that I aſſert here is nevertheleſs certain, *viz.* that a prodigious force is exerted within the body of the muſcle; which follows from this known circumſtance, that it is confined to act in a narrow ſphere, while the weight is to be moved through a large compaſs; and that therefore this is a wonderful inſtance both of the wiſdom of God in contriving, and his power in exhibiting this phænomenon. We are ignorant of the formal manner how lightning hath ſuch ſtupendous effects; yet the effects themſelves are not to be conteſted. If we are certain of a particular circumſtance in any *appearance* which is above any thing but infinite power to effect, ſuch as in this caſe, for inſtance, the prodigious force exerted, and which it is neceſſary ſhould be exerted, on account of the narrow ſpace it is confined to as a mechanical power, while the weight to be moved lies at a great diſtance; and if we are certain that ſuch a force is applied, which though it acts with ſpeed and violence, yet acts mildly and innoxiouſly to the neighbouring parts, and without pain even to the moſt tender parts themſelves, though actually concerned and employed in the production of the phænomenon; if we are certain of this, I ſay, we have all the reaſon in the world to admire that Power which is able to make good ſuch an effect, and that too by a method ſo different from what our weakneſs would force us upon, though we are entirely ignorant of the formal manner how this is brought to paſs. If we act *ſtrongly* we act *deſtructively*; but here the power is exerted in another manner. It acts with *ſtrength* and *vigour*, and yet with *ſafety*; the force applied is *guarded* and *reſtrained*, and therefore, though immenſe, it does no miſchief. What if this is done by way of a ſtring of bladders? This neither diminiſhes the power exerted, nor the contrivance. We ſaw before that a ſlender film of air ſupports a mighty weight, and that without contact. This but increaſes the wonder; for matter cannot reſiſt above its *vis inertiæ*, nor, being inert, multiply the force impreſſed upon it; and the ſuperplus of force exhibited muſt come from another hand. In ſhort, a weight cannot be ſuſpended but by an equality of re-action either from the *inactivity* of matter, or from a *living power*.

If

mitted to ſhew the difference between the method of the Deity and of us men in the exertion of power, by the following rude compariſon. Let us

If we knew the mechanical manner of muſcular motion, could we ceaſe to admire, or immediately aſſign a *new power* to matter to anſwer the appearance? This would be quite wrong. As I have ſaid above, we can trace power and wiſdom in any of the works of nature a great way, to ſhew us the perfections of the cauſe; but we cannot purſue the inexpreſſible ſubtilty of contrivance and machinery to an end, to teach us to admire beyond what we can formally conceive. And this is as rational in right philoſophy (that is, where finite intelligent Beings are to be inſtructed by the works of an infinite Architect), and as abſolutely neceſſary, if we would act rationally, as it is to aſcribe what we formally conceive to art and power. Would we know all the art and power of an omnipotent *Creator*; or allow no power and art beyond what we know? Let one anſwer this at his leiſure. We are but in our firſt ſtage of exiſtence; a fund of inſtruction is undoubtedly reſerved for us till hereafter. What elſe were philoſophy worth, if not to train us up in the knowledge of this *Cauſe*, but to gratify an unmeaning curioſity, or be a meer paſtime, or to make us deſpiſe others? There cannot be propoſed another conſiſtent end of it. Would we purſue the knowledge of mechanical cauſes in nature to help us to admire the *skill* and *art* of *chance*, or the *wiſdom* of *neceſſity*? I wiſh men would think on this plain, ſhort queſtion.

But to return, any one will ſee that my deſign, or the particular argument here, doth not lead me to eſpouſe any hypotheſis; but to ſhew in general that motive power cannot be lodged in matter; nor therefore that the direction of the force, nor the contrivance and deſign can be imputed to it, or to any ſurd cauſe. The true mechanical ſolution of any phænomenon, whenever it is given, or by whomſoever it is diſcovered, will always confirm this. I have no occaſion therefore to thruſt myſelf into the controverſies of philoſophers that are out of my road, unleſs they oppoſe this concluſion; in which caſe ſome better hand will certainly appear in ſuch a cauſe. In ſpeaking of theſe particulars of muſcular motion, *viz.* the great force exerted, and the narrow ſphere it acts in (which are very certain circumſtances) I refer to *Borelli*, as the *moſt authentic writer*. Yet he calls the chapter where he ſpeaks of the cauſes of the contraction of the muſcles, *De cauſis probabilibus* only; and in another caſe, he ſays, *Fateor me non ſercipere mechanicam rationem, &c.* as was cited juſt now. Here is no hypotheſis obſtinately defended. He propoſes what he thinks probable; every one will do the ſame. Sir *Iſ. Newton* hath propoſed his *elaſtick Fluid* to anſwer the ſame appearance. I compare this force to that of gun-powder, not by way of hypotheſis, but to help myſelf, and others like myſelf, to conceive the *ſuddenneſs* and *ſtrength* of the effect. Thus far the compariſon ſerves; but in reſpect of the *harmleſſneſs* of the force it *baulks*. To a like purpoſe I make uſe of another rude compariſon of the lever immediately after, which indeed wants much indulgence. Why ſhould our ignorance of what we know not hinder us to make a right uſe of what we know? When we conſider that in every ſucceſſive intumeſcence of a muſcle, there is a ſudden exploſion, as it were, where a certain matter is conſumed (as, according to *Borelli*, I think the phænomenon of laſſitude declares) and conſider farther the *quickneſs*, the *indefinence* of this, as when one walks a whole day, or works at any hard labour; we ſhall hardly be able to help admiring the power, the goodneſs, and (if one durſt ſo expreſs it after our manner) the pains the infinite God of nature is at in animal motion.

3 ſuppoſe

suppose a *lever* twenty or thirty foot long on one side of the *fulcrum*, or point supporting; and scarce half a foot on the other: *man* would apply his little power to the twenty-foot extremity to raise the weight through half a foot; but the *Author of man* applies a sufficient force to the half-foot extremity to move the weight through a sphere of twenty feet. This may help us in some measure to form a notion of the difference of the method, and of the effect produced.

XXIV. From this we may see the truth of what was said, N° 9. sect. 1. *viz.* that matter is so powerfully resisting a thing, that man could overcome the resistance but of a mighty inconsiderable part of it, without the concurrence of a greater power than his own; for really all the motion that is to be properly ascribed to his power, is that impressed upon the first moved subtile matter, which occasions a superior power to be exerted in all the other parts of the body. And this again infers all that was asserted, N° 12. of this. For as it appears by what was said, from N° 26. sect. 1. to that N° 12. that the *first Cause* is the *constant* and *sole Mover* in all the inanimate and unvegitating parts of matter; so it evidently follows from what hath been said since, that *he is no less powerfully present* in all the spontaneous motions of animals; which (except as to the will and spontaneity, and a small force impressed on a very inconsiderable part of the matter of the body) are immediately effected by him. Let us take an example, to consider how many ways his power is exerted in producing the effect in an ordinary instance, without dissembling truth for fear of its consequences. *Truth can have no ill consequences; nor need we be afraid to follow wherever it leads.* When one discharges an arrow out of a bow, the spontaneous mover (the immaterial part, or soul) *wills and designs* the production of the action: and this entitles it *his action*, in all the moral consequences of it, whatever they are. This mover doth moreover something that sets the mechanism of the body at work; and thus far only it is an agent. The matter of his limbs, the natural powers being exerted in it by the *first Mover*, in consequence of the *spontaneous mover's* willing, impresseth by its resistance and firm cohesion, (which is also *his* impulse) a force on the bow, whereby it is bended; and this is the immediate efficiency of the *first Mover*. This force is withdrawn, and the spring of the bow hath scope to be exerted, and to discharge the arrow. This is again the effect of the *first Mover*. As soon as the arrow is out of the bow, the action of gravity constantly impels it, so that it moves in a certain determined

determined path, or curve; and in its deſcent, what by the action of gravity upon it, (which is the conſtant impulſe of the *firſt Mover*) and what by the force communicated to it by the reſtitutive action of the bow, alſo impreſſed by *him*, it falls on an innocent man perhaps, and wounds, or kills him. How far the Atheiſt may miſtake this as an objection to the goodneſs and juſtice of this Being, we may ſee hereafter. But in the mean time it is evident, that the particular mover in the human body hath but a ſmall ſhare in producing all this motion. And yet from thence a gradation begins to be perceptible (*n*).

XXV. When I conſider this whole reaſoning, and withal reflect how oppoſite it is to the ſettled prejudices of men, I foreſee it will be narrowly canvaſſed both by *friends* and *adverſaries*; and am hopeful from reviewing it over and over, and conſidering the frivolouſneſs of the objections that have been yet offered againſt it, that it will be found ſolid and juſt, or at leaſt that no miſtake will be found affecting the main concluſion: and I am the more encouraged to hope this, by conſidering that Dr. *Clarke* carries this ſpeculation the ſame length. And I am alſo perſuaded that any man who begins with the *vis inertiæ* of matter, and reaſons fairly, muſt carry it the ſame length. Only let me obſerve, that if the Doctor had written in that diffuſe manner I have done, and on this ſingle topic ſeparately, how many other arguments, nay how much better arguments (I ſay it without affectation) might have been reaſonably expected from him! And now having ſaid thus much, let us ſtop a little to ſet the former arguments and our prejudices againſt each another. What may one

(*n*) If we obſerve, there is a *gradation* or *ſcale* of *aſcent* of the principle of action among creatures, in proportion to their perfection. For from what is here ſaid, it is plain the firſt Being is the ſole principle of action in all *inanimate matter*. In *animal motion*, the animals themſelves are admitted into a ſmall participation of the production of the effect, as they have the direction of ſome motions, or the power of beginning them. *Brutes* and *men* are thus far ſpontaneous with regard to the motions of their bodies. But men have farther a power of directing arbitrarily their perceptive capacity to and throughout their paſt perceptions, which brutes have not, as ſhall be ſhewn, and which therefore is the *ſpecific difference* betwixt rational and irrational beings: for this power is the foundation of the rational nature. Of theſe things afterwards. As to the power of moving matter, it is extremely probable that higher orders of beings, have it in a great degree; and that, as Dr. *Clarke* inſinuates, they may exert this power for particular deſigns of Providence. But ſtill the univerſal influence upon matter, and that various impulſe whereby all the particular parts of the Univerſe, and individual things, by a conſtant law and tenor, are preſerved, muſt proceed from the firſt Cauſe.

ſeriouſly think of all that paſſes in nature? *I riſe from my ſeat.* By whoſe power? *I proceed a ſtep.* Who aſſiſts me? What various action is here excited by the ſimple act of my will, without my farther participation! *I move my hand, my finger; I pronounce a word.* Muſt I have recourſe to the living powers of dead matter? *I feel my pulſe; obſerve my reſpiration.* What action and power are exerted in theſe? Who exerts it? Are inert particles, finely ſet together, ſufficient? Philoſophy will not allow us to admit of ſuch abſurdities. What are we to admit of then? Can power and wiſdom be the effect of nothing? Or of any thing but a powerful and wiſe Being? Doth vigilant matter perform all while I ſleep? Is it unphiloſophical credulity to believe a God? Philoſophy ſhould then explain things without him. Or is any one man ſingular in having ſuch various *action* inceſſantly performed for him? Is nothing done for any *other* man, any other animal, any vegetable?——*But is it poſſible to find ſo much power as to perform all this?*——Is not that power poſſible which is actually exerted? We would not ſcruple to allow *nature* (a ſurd entity in our minds, a philoſophical name) all this power.——*But can all this power belong to one Being?*——Infinite power may belong to one Being. It cannot belong to two. There ſhould neceſſarily be a diviſion. Infinite power divided ceaſes to be infinite power. Infinite power muſt belong to one Being.——*But can one Being be every where preſent, to exert ſuch various action about me, every other man, every other thing?* He would not elſe have infinite power. Excluding it from any place, or thing, limits it.——*But can ſuch a Being ſubject himſelf to ſuch conſtant, univerſal, little work? Doth the Deity really actuate the particles of matter in my vile body? Is it not more philoſophical to find out ſome leſs worthy cauſe to anſwer this univerſal effect?* Yes perhaps; dead matter, univerſal chance, univerſal neceſſity, ſomething that acts wiſely and powerfully univerſally, without either wiſdom or power. Theſe are leſs worthy cauſes, but they are contradictory ones. Perhaps infinity of power may be puzzled, ſtraitned, perplexed; perhaps it cannot reach to infinitely little things; things below a certain greatneſs? But is this univerſal effect ſo unworthy? Whoſe is the matter of the vileſt inſect? By whoſe laws, whoſe wiſdom was it formed?——*But really* (ſay you) *this is very terrible! Is the power of God conſtantly ſo near me? Doth he know ſo intimately every thing I do?* Why? If he be infinite, where can we lurk? What other thing, what other being beſides this infinite one could preſerve us, and perform the various actions on which our life depends? Is it ſo terrible to be preſerved a

thouſand

thouſand different ways? We are rational; if we act as ſuch, what have we to fear? He is infinitely rational, and cannot but love the works of reaſon.——In all theſe queſtions, the men who ſcorn to be determined by any thing but the force of reaſon, will determine, and chuſe their own ſide.

XXVI. And now, can we be at a loſs for a demonſtration *that there is a God*; that he is near *every one* of us, at *all* times; when the greateſt philoſopher cannot account for the motion of his own finger, without having recourſe to his power immediately put forth in the performance of it: when we cannot turn our eyes, our thoughts, to any one thing in nature, which doth not ſhew his power immediately exerted: when otherwiſe, the parts of our own bodies would be ſcattered like duſt before the wind, by every force that could only overcome their ſimple *vis inertiæ*, that is, (N° 8. of this) *by every force?* And if we conſider that the other infinite perfections in the Deity of juſtice, wiſdom, and goodneſs, cannot be ſeparated from his preſence, knowledge, and power, without denying his exiſtence entirely, and at the ſame time all evidence and truth, as ſhall be ſhewn; if we conſider this, I ſay, it all together affords us ſuch a view of the Divine Providence, as muſt be very comfortable to creatures otherwiſe ſo *weak* and *helpleſs* as we are; extremely pleaſant and ſatisfying to the *rational* nature, that muſt be pleaſed to find an *infinite reaſon* at the head of things, inſtead of the Atheiſt's ill-ſupported, tottering world; and wonderfully aſtoniſhing to our weak and finite comprehenſions. This is *that ſcene of Providence* deducible from matter of fact in the Univerſe, confirmed by one uninterrupted experiment (his power indefinently exerted on every thing to which we can turn our thoughts or eyes) and diſcovered (as was ſaid in N° 7. ſect. 1.) from this ſingle truth, *that matter, as a ſolid, extended ſubſtance, neceſſarily reſiſts all change of its preſent ſtate of reſt or motion.* And now let the Atheiſt be asked in his turn, what reaſon *Lucretius* had for exclaiming againſt his notion that a being could be *omnibus inque locis, inque omni tempore præſto (o)*; and for ſetting up in his room, according to his own unphiloſophical prejudices,

(o) *Nam (proh ſancta Deûm tranquilli pectora pace*
Quæ placidum degunt ævum, vitámque ſerenam!)
Quis regere immenſi ſummam; quis habere profundi
Endo manu validas potis eſt moderanter habenas?
Quis pariter cœlos omneis convertere? & omneis
Ignibus æthereis terras ſuffire feracis?

judices, an *infinity of nothingness* beyond all being, and a huge monstrous necessity, an empty unsupported cause of things, itself nothing, and belonging to nothing? From this also may appear how little is in that boasted argument of his and his followers, *that in an infinite lapse of time, all possible combinations of things must have happened, and so all possible productions of plants and animals must have been effected* (*p*). 1. Matter resists motion, and wants an extraneous, immaterial Being to move it. 2. If put in motion, it resists a change of the direction. 3. If the direction is changed, the quantity of motion is diminished, from the collision of the atoms among themselves. *Hence not one single new combination could have happened through all eternity*, allowing matter could have existed without a cause. 4. But

Omnibus inque locis esse omni tempore præsto?
Nubibus ut tenebras faciat: cœlique serena
Concutiat sonitu? tum fulmina mittat; & ædeis
Sæpe suas disturbet; & in deserta recedens
Sæviat, exercens telum, quod sæpe nocenteis
Præterit, exanimâtque indignos inque merenteis?
Lib. 2. ver. 1092.

I beg these lines may be remarked. *How grandly doth a contradiction sound, set off in a poetical dress!* A reader cannot withstand his own prejudices when he finds them recommended to him in such lofty numbers. He calls the Gods to witness against themselves, that they have no power; that no being can have power to wield the heavenly bodies, and drive them round, and perform the other effects that are done in the Universe. But may we not stop him in his sublimity, to ask, If no being hath power to do this, how comes it to be done? He will answer, this power is so great that it can belong to no being: therefore it is better to find out something else that may perform these effects; atoms, chance and necessity may perform all. But the first of these causes, *atoms*, is inert, or hath only a negative power; *chance* is a bare sound; and *necessity* is a cause which has nothing to recommend it but that the word consists of two or three or more syllables. It is strange that such stuff should pass for philosophy, and have amused the world so long! The names of these causes are now somewhat antiquated, and their power is recruited with a *new appellation*. We call them *nature*, and *the natural powers of matter*. If we would add the epithet, *inactive*, and say honestly, *The natural powers of inactive matter*, we should spoil the whole mystery of all kinds of Atheism at once.

(*p*) *Nam certè neque consilio primordia rerum*
Ordine se quæque, atque sagaci mente locârunt;
Nec quos quæque darent motus pepigêre profectò:
Sed quia multimodis, multis, mutata per omne
Ex infinito vexantur per cita plagis,
Omne genus motûs, & cœtûs experiundo,
Tandem deveniunt in taleis disposituras,
Qualibus hæc rebus consistit summa creata.
Lib. 1. ver. 1020.

making

making a large conceſſion, that the juſt combination of atoms, requiſite to form the body of an animal, ſome way or other might have happened; *the two moſt eſſential things* are ſtill wanting; a *conſtant extraneous impulſe* to be the *power* in circulation, reſpiration, and all other motions purely mechanical; and farther, another *immaterial principle*, to be the *loco-motive power* in ſpontaneous or voluntary motion. Beſides, learned and good men, taking the argument at all diſadvantages, have ſhewn that the *improbability* of ſuch a combination of atoms is to the *probability*, as an infinite number to unit, or nothing. Only it ought to be conſidered in this kind of argument in reaſoning about the degrees of probability, whether that doth not allow the effect in ſome degree poſſible, which yet is abſolutely impoſſible. The argument cannot come to a calculation, without ſuppoſing the poſſibility, and reality too, of *four ſucceſſive contradictions*.

XXVII. Let us now return to the conſideration of the other properties of the human ſoul, and ſee whether it is poſſible that matter may be capable of them. The *ſecond* ſpecies of activity mentioned in N° 1. ſect. 1. is *ſpontaneity of thought*, where the power is exerciſed over our own perceptions; and it implies the power of willing, as being really exerciſed by volition. If we are active in turning our perceptive capacity to any object, it muſt be by willing; and if we do not will this, we are not active but paſſive in it. And generally, *no kind of activity is conceivable without volition*: a thing that is incapable of willing the action that is performed by it, muſt be ſuppoſed *to be phyſically impelled to it*, but not to have the principle of action in itſelf. "If it acts blindly, and without being capable to will "the action; *why ſhould it ever ceaſe from action, or ever begin the action?* "It ſhould either act *always*, or *never*." This ſhews that it muſt have an external determining principle. We cannot aſcribe a change from *action* to *non-action*, or *è contra*, but to ſome cauſe. *This principle* ſhould have been more regarded by men who ſpeak of active matter, and active powers in matter. If matter effects a change of ſtate in itſelf blindly, and without a principle; it muſt either *always* effect it, which I have ſhewn to be contradictory, (ſee the note at N° 14. ſect. 1.) or *never* effect it, which is no leſs a contradiction. *That is*, when a change of ſtate is effected in matter, it muſt be by an external principle determining it, or by the internal determination of volition: or, that it cannot be without one of theſe, or ſome third way. But it is as good as already proved, that matter cannot be endued with the power of volition. It was ſhewn before, N° 19. of this,

that ſpontaneous motion is effected by volition; *ſpontaneous* motion is the ſame as *voluntary motion*. Now nothing needs be more evident than that, ſince to effect motion is abſolutely above the power of matter, *the power that effects motion is abſolutely* above matter. Or take it thus, matter as a ſolid ſubſtance neceſſarily reſiſts all change of ſtate; *therefore it is incapable of being endued with that power that could change its ſtate:* If it were capable of being endued with this power, we ſhould be obliged to deny its reſiſtance; and therefore its moment, (N° 22. ſect. 1.) as alſo its ſolid extenſion (N° 26.) In ſhort, it is as incapable of being the ſubject in which this power and reſiſtance can at once reſide, as of being the ſubject in which reſiſtance and its contrary can at once reſide. Matter therefore is incapable of all kind of activity, or of being endued with any power, except that one negative power of remaining in the ſtate in which it at preſent is, as Dr. *Clarke* aſſerts.

XXVIII. Now ſince this is ſo, though we ſhould grant that matter might have a degree of perceptivity in it, yet notwithſtanding of this perceptivity, it muſt be as inactive in all ſenſes, as it could be without perception. It could as little move itſelf then, or change its preſent ſtate of reſt or motion, as impercipient matter could; and it could as little turn its perceptivity to any object, or change the ſtate of its perception, as it could turn itſelf to another poſition, or change the ſtate of its reſt or motion; that is, as if it wanted that capacity altogether: ſince either of theſe would ſuppoſe activity, or *a power of willing* in it: that is, it would be as ſluggiſh, dead matter, in all ſenſes, as any ſuppoſition could make it. But ſurely to aſcribe ſuch a property to it, as leaves it as inactive, either to *motion*, or *thought*, as when that property is denied of it, is folly. The only remaining reſource for the Atheiſt is, to ſuppoſe, *That poſſibly ſome kind of activity may be among the powers of matter*, which was juſt now ſhewn impoſſible. Any other being could never know whether it had ſuch a degree of perceptivity, or not; ſince it could do nothing more to diſcover it, than matter that had no perception: that is, *it is impoſſible the perſon who aſſerted this, could ever have any ground for his aſſertion.* And laſtly, from ſuch perceptivity thinking could never be produced; for thinking implies active perception, or *activity joined with perceptivity.* For which cauſe it is that, though irrational animals are percipient, and alſo active in willing motion; yet wanting the other ſpecies of activity, the ſpontaneous direction of their perceptive capacity towards and through their paſt perceptions, they cannot be called *thinking creatures.* XXIX. But

XXIX. But really matter hath no ſuch perceptivity at all: for of what could it be percipient? Not of its own action in *moving*, nor of its internal operations in *thinking*; all action in it being impoſſible. Thus it would have no object to be perceived. If it ſhould be ſaid that it might be percipient of the action of other matter upon it; not to mention that action is impoſſible in all matter alike; then ſuch perception ought to be as mechanical and neceſſary as the action of matter upon matter is. And becauſe *action* and *re-action* are equal, the perception ought to be excited equally in both the *matter acting*, and the *matter acted upon*. The perception ought to be ſtrong according to the force of the colliſion: nothing but no force at all could produce no perception at all; but in all other caſes the perception ſhould be ſomething. But theſe conſequences are abſurd, and falſe; and therefore the ſuppoſition from which they follow muſt be ſo too. In a mortified or gangren'd limb we have no perception, though it is touched, or even cut off. It muſt be organically united to the *percipient being* in us, that perception may be excited by the action of other matter upon it. We had perception of the action of other matter upon that part before, but have it not now, when the organiſm is vitiated; which ſhews that ſome other thing is neceſſary beſides the action of matter upon matter. When we touch the hair of our head, action and re-action being equal, the perception ought to be as ſtrong there as in the other part: ſo if the finger ſtrikes againſt the eye, or any ſore or wounded part, the quick ſenſe of pain ſhould be felt in both parts equally. And ſince matter cannot be percipient, it cannot have ideas; ideas are perceived, and are conſequently nothing but perceptions; and therefore it cannot have ſenſation, feeling, or life, becauſe all theſe imply perception (*q*).

XXX. From this we may ſee what little reaſon Mr. *Locke* had to be ſo peremptory in his diſpute with the biſhop of *Worceſter* about the poſſibility of matter's thinking; where, to prove it poſſible, he ſays, "For example, "God creates an extended ſolid ſubſtance, without ſuperadding any thing "elſe to it, and ſo we may conſider it at reſt: to ſome parts of it he ſu-

(*q*) This whole argument that matter cannot think, nor move itſelf, concludes in much fewer words, from conſidering the endleſs diviſibility of it; which ſhall be inſiſted on, when we come to conſider the pleaſures and pains of the body, as diſtinct from thoſe of the mind.

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" peradds motion, but it has ſtill the eſſence of matter. Other parts of " it he frames into plants, with all the excellencies of vegetation, life, and " beauty, which is to be found in a roſe or a peach-tree, above the eſ- " ſence of matter in general, but it is ſtill but matter. To other parts he " adds ſenſe and ſpontaneous motion, and thoſe other properties that are " to be found in an elephant. Hitherto it is not doubted but the power of " God may go. But if one venture to go one ſtep farther, and ſay God " may give to matter, thought, reaſon, and volition, as well as ſenſe and " ſpontaneous motion, there are men ready to limit the power of the om- " nipotent Creator, and tell us he cannot do it; becauſe it deſtroys the eſ- " ſence, or changes the eſſential properties of matter, *&c.* (*r*)" A man may warrantably ſay, that to effect a contradiction is not the object of *any power*; nothing leſs limits *Omnipotence:* and ſuch it is to effect that a ſub- ſtance, which as ſolidly extended, muſt reſiſt all change of ſtate, ſhould, while remaining ſolidly extended, become of *dull*, *dead earth*, life, ſenſe, and ſpontaneous motion (*s*); for that is to ſay, it becomes *living*, *ſenſible*, and *ſpontaneouſly moving earth*, while it remains dull and dead earth. So that, notwithſtanding of this complaint, as if the biſhop had been unrea- ſonable in oppoſing his concluſion, it appears the reaſon was good, and that he could not go one ſtep farther, without deſtroying the eſſence of matter, *viz. ſolid extenſion*; and that he had gone a *ſtep* or *two* too far be- fore, in making the *ſpontaneous mover* in an *elephant*, and the *external mover* in the mechaniſm, both of plants and animals, *properties* of dull and dead earth. A little farther on he is more expreſs: " But if you mean (ſays " he) that certain parcels of matter, ordered by his divine power, as ſeems " fit to him, may be made capable of receiving from his Omnipotency " the faculty of thinking; that indeed I ſay, and that being granted," *&c.* (*t*). This author hath well obſerved, that they are different conſide- rations that prove the ſoul *immortal* and *immaterial*; but yet when he ſays, " That it is as evident to him, that brutes reaſon in ſome inſtances, as " that they have ſenſe (*u*);" and here takes it for granted, " That it is but

(*r*) Book 4. chap. 3. ſect. 6. in the Note at theſe words, *We have the ideas of matter and thinking, but poſſibly ſhall never be able to know, whether any meer material being thinks, or not; it being impoſſible for us, by the contemplation of our own ideas, without revelation, to diſcover whether Omnipotency has not given to ſome ſyſtems of matter fitly diſpoſed, a power to perceive and think, &c.* This is founded upon what Mr. *Locke* elſewhere endeavours to maintain, That our ideas are only *arbitrary combinations*, without connexion to any thing in nature.

(*s*) In the page immediately after, *viz.* 145. vol. 2. edit. printed 1715.

(*t*) Pag. 150.

(*u*) Book 2. chap. 11. ſect. 11.

 " mere

" mere matter with ſuperadded properties, that thus reaſons, (though he offers no proof of either of theſe aſſertions;) and, ſince all men ſuppoſe the matter of the brute body finally diſſipated at death, this gives an *ignorant ſceptic* courage to affirm that it may be ſo with the human ſoul. Why ſhould we maintain a point *gratis*, and barely for maintaining's ſake; as here Mr. *Locke* allows the ſoul is immaterial, but contends it might have been material; why, I ſay, ſhould we maintain a point *gratis*, that hath a bad tendency? Were all other arguments wanting, this itſelf ſhould be one againſt it. No truth by being known could have a bad effect on the minds and lives of men: and contrarily, what will always have a bad effect on the minds and lives of men, will have ſtrong probability at leaſt againſt its being truth, ſuppoſing no argument could be brought for or againſt it.

XXXI. There is another particular here, which I can't help remarking, tho' it's almoſt ſuperfluous; which is this, becauſe *we cannot conceive how matter acts on ſpirit, or ſpirit on matter*, we fall to making hypotheſes and conjectures, which we might as well let alone; for theſe ſuppoſitions only give us eaſe through a miſtake. Thus *ſome* make all created ſpirits not wholly free from matter, that they may be acted upon by matter. *Others* rarify matter to a vaſt degree, and make ſpirit of that; and *others* have given our ſouls material vehicles, to give and take impreſſions to and from matter. But if this matter with which ſpirit is *mixed*, (as it is expreſſed) be not reſiſting matter, it can never make any impreſſion on the matter of the body, which is reſiſting matter, and requires force or *moment* in the matter that makes an impreſſion upon it. So that it were as good to give ſpirit no material vehicle, as a vehicle of *unreſiſting* matter; ſince it muſt, notwithſtanding of this vehicle, make impreſſion upon body immediately by itſelf: and we had as good give it no vehicle at all, as a vehicle of *reſiſting* matter; ſince ſpirit could as eaſily affect the matter of the body immediately, as the reſiſting matter of its own vehicle. Beſides, ſince we cannot conceive how any thing not matter ſhould act on matter, or how matter ſhould act on any thing not matter; we are as much at a loſs to conceive how the ſpirit acts on its vehicle, or it upon the ſpirit, as without that hypotheſis. Thus much is certain, that ſince a ſolid extended ſubſtance, as ſuch, is inactive and dead, and yet is moved, it muſt be moved by a ſubſtance not ſolidly extended, whether we conceive the manner of it or not. The *firſt Being*, who is ſurely a pure Spirit, moves matter. This power of moving ſome matter, though in an infinitely ſmall degree, it hath

hath pleaſed him to impart to the human ſoul: For however it may be joined, or mixed with matter, it is certain the motion excited in matter muſt ariſe from the ſubſtance purely ſpiritual; and that even the matter imagined to be *blended* or *mixed* with it, muſt be moved and actuated by what is not matter; otherwiſe there would be no need of any immaterial ſubſtance. And on the other hand, if an immaterial ſubſtance is acted upon by matter, it can be no greater relief to the imagination, to ſuppoſe it acted upon by the matter joined to it, or mixed with it, by its vehicle, for inſtance, than by the other matter of the body, to which it is vitally united. Theſe I think are but *fruitleſs ſtruggles of the imagination* to graſp things that do not belong to it; to conceive the action of ſpirit on matter, or matter on ſpirit, after the manner of the action of matter upon matter.

XXXII. This truth, *that matter cannot be moved without an immaterial* Being, may help to take away the old controverſy, *Whether the ſoul is propagated by traduction*, kindled up as it were by the ſouls of the parents, as one flame excites another, without loſing any thing of itſelf; if it is true that there is a pre-exiſtent animalcule in the ſemen, which moves ſpontaneouſly. And indeed there is little reaſon to doubt this, more than to doubt the circulation of the blood; both are diſcovered by ſenſe the ſame way aſſiſted; if we believe from the information of our eyes, that there are *ſeveral very rapid torrents* continually flowing in the *ſlender film* between the toes of a frog, we muſt alſo believe that there are numerous animalcula in the male-ſeed. Beſides that we muſt otherwiſe return to the juſtly exploded abſurdity of equivocal generation: for it is as conceivable (in the ſtated laws of generation) that an animal ſhould ſpring from a hair of the head, as that the heart ſhould grow firſt, and the other parts of the animal accreſce to it afterwards in their proper places. *All animal growth or vegetation is performed by a circulation of fluids, and not by a mere addition of parts, or agglutination to the outſide of things already compleat.* Therefore if we would ſay that a certain part of the animal body is formed before all the reſt, we muſt allow a circulation even in that part, ſuppoſing it an organized compleat ſyſtem by itſelf; or elſe we make it a mere excreſcence of the body of the parent animal, and formed in a manner below the vegetables, in which though probably there is not a perfect circulation of the ſap, yet there is ſomething equivalent thereto. [See Mr. *Hales*'s *Vegetable Statics*] by which every part of a plant is expanded,

and, if I may ſo ſay, receives nutriment and growth internally. The origin, or rudiments, of a living creature therefore muſt be *one co-eval ſyſtem*, containing a *circulation* of juices and nouriſhment. And generally all ſeeds of things ſeem to be the immediate and particular work of Omnipotence. If they were natural productions, it is ſcarce conceivable that they ſhould regularly keep their kinds (*v*). Theſe little ſyſtems then moving thus ſpontaneouſly, require as much an immaterial Mover, as afterward when grown larger, and unfolded into all perceptible members of an animal. But when the body, folded up in this ſmall volume, and its *immaterial Mover*, were firſt united, is not a point ſo eaſily to be determined. Poſſibly the *ſeminal atom*, though exiſting from the firſt creation of matter the ſame individual ſyſtem, is not yet informed by its *immaterial inhabitant*, till it comes through various changes, to be at laſt depoſited in the proper receptacle of the parent animal. At leaſt it doth not appear that one who ſhould ſay this, could be ſhewn to affirm any thing abſurd or impious. It ſhould not give us a low notion of the human ſoul, that it is ſhut up in ſuch a diminutive ſyſtem, or ſo long hinder'd from the improvement and exerciſe of the powers it is endued with: *great* and *ſmall* are but comparative in this caſe, and not abſolute. If the body, of what bulk ſoever, were without *eyes*, *ears*, and *the ſenſe of feeling*, it would be as much ſhut up, and the exerciſe of its faculties as much impeded as in its original ſtate. But the chief argument againſt this abſurd opinion of the generation of ſouls (and that equivocal, if I may ſo ſay) is the conſideration that the ſoul

(*v*) It is true, after we have ſeen that the influence of God is ſo univerſal on all the parts of matter, we cannot be afraid that there ſhould be any miſtake or confuſion of the ſpecies of things in the world; yet, I think, we are forced to conceive this to be, by an immediate particular act of Providence, in forming their original ſeeds, and that they are not left to be produced by vegetation. The law of vegetation ſeems to ſuppoſe a pre-exiſtent ſubject or ſeed, beſides matter in general, which ſeed itſelf is not produced by vegetation. But if we are forced to conceive a *double act* of Providence intervening here, as it were; how can it be accounted for without any Providence at all? Obſerve how *Lucretius* repreſents the difficulty juſtly great; and then conſider his principles for the ſolution of it.

——————*genus omne ferarum*
Incerto partu, culta ac deſerta teneret.
Nec fructus iidem arboribus conſtare ſolerent,
Sed mutarentur: ferre omnes omnia poſſent.
Quippe, ubi non eſſent genitalia corpora quoique
Quæ poſſet mater rebus conſiſtere certa?

Lib. 1. ver. 164.

is immaterial: for it is as absurd that immaterial substance should generate immaterial substance, as that matter should generate matter. Such generation would not differ from creation. And the opinion of the traduction of souls must either suppose new immaterial substance generated, or that these souls are material, or some power of matter. All which are absurd.

XXXIII. And this again prevents an unskilful objection of sceptical men, That a good and just Being could not infuse a soul in adulterous or incestuous copulations (*x*). For, if what was just now inferred be true, the soul is previously united to the *seminal system*. But were the thing as they imagine it is, it would be no objection to a fair and rational *Enquirer:* for the whole rests on this supposition, *that an infinitely good and just Being must hinder all injustice and wickedness*. But this would be to take away freedom and spontaneity of thought from thinking beings; and amounts in effect to as much as that he should not have made a free, or even a thinking *Being* (*y*) at all: since all the *obliquity* of a moral action, or the deviation from *the rule of action* consists in the *thought* and *will*. This is a bold way of objecting, which a man, who considers what he says, will be aware of. Freedom is a perfection; and any of the objectors, no doubt, takes him-

(*x*) This objection seems borrowed from *Lucretius*'s ridicule on the subject of souls entering into bodies, in the following lines, Lib. 3. ver. 777.

Denique connubia ad veneris, partúsque ferarum
Esse animas præstò, deridiculum esse videtur;
Et spectare immortaleis mortalia membra
Innumero numero; certaréque præproperanter
Inter se quæ prima, potissimáque insinuetur:
Si non fortè ita sunt animarum fœdera pacta,
Ut quæ prima volans advenerit, insinuetur
Prima; neque inter se contendant viribus hilum.

It is certain, by what goes before, that every animal hath a *living immaterial substance* notwithstanding of this sneer; and that the *union* is the particular effect of infinite power.

(*y*) Without *freedom* there cannot be a *thinking being*, but only a bare percipient being: *for* thinking implies *the turning the perceptive capacity from one perception to another, by an act of the will*; otherwise a percipient Being would have but *one solitary* perception always in view. And if the Being doth not this by an act of the will, but is *impelled* by an external principle, how can it be said *to think*, being *acted*, and not *active*, in every thing beyond bare perceptivity? What is it to *will?* Is it not to *act?* If it be to *act*, it is to have *the internal principle of action:* and if it hath the internal principle of action, it must be *free*, and *needs not* be further acted or impelled in thinking. An *active* being, a *thinking* being, and a *free* being then, are synonymous terms.

ſelf for a nobler, perfecter creature, than an *oyſter*, or a *muſcle*, which, though in ſome meaſure percipient, are yet percipient but of one conſtant, neceſſary ſenſation. *How unreaſonable are we!* We would have the liberty of gratifying unreaſonable paſſions, and purſuing falſe pleaſures; and yet pretend to quarrel with God for allowing us that liberty. *Would we be free?* This queſtion I ſhall ſuppoſe anſwered. No one would chuſe to be ſuch a creature as an *oyſter*, or a parcel of inanimate matter. *Would we be neceſſitated to do good only?* ——— Let it be obſerved; we are under all the *moral neceſſity*, that is, have all the moral motives that the nature of things can admit of: a greater neceſſity of this kind than we are under is an abſolute impoſſibility. That *would ſuppoſe that virtue might be more reaſonable*; or *that we might have more reaſon for acting rationally, than we have.* ——— And contrarily, we have none of this neceſſity at all for doing evil: that too is as abſolutely impoſſible; unleſs we call that a neceſſity which is of our own procuring, by precontracting vicious habits. This is as advantageous and wide a difference as we could conceive. ——— To be phyſically impelled to good, or repelled from evil, is again inconſiſtent with freedom: to be *not agents*, but *mere puppets*, played with *wires* and *ſprings*, incapable of virtue itſelf. ——— Thus, unleſs we would have the *natures* of things *violated*, that is, *an impoſſibility wrought* to pleaſe us, our condition with reſpect to *freedom* and *neceſſity*, is abſolutely the beſt and moſt advantageous we could have been placed in.

XXXIV. As to God Almighty's ſupporting the mechaniſm of our bodies, while an evil action is committed by us, and acting upon matter then with the ſame *conſtant impulſe* of gravity, attraction, coheſion, *&c.* as at other times; let us conſider that the *bare materiality* of the action, that is, *in ſo far as it is performed by the motion of matter*, is in itſelf neither morally good nor evil; for the ſame material action, which at one time is *evil*, is *good* at another, according to the difference of the circumſtances: that is, the *good* or *evil* doth not lie in it, but in ſomething elſe; namely, the *will* and *deſign*, as has been ſaid. If we were creatures that had no communication with matter at all, or if the motion of that ſubſtance were unconcerned in our actions; yet if we had the *ſame*, or equally *bad thoughts*; then, as now, there would not be leſs moral evil, nor we leſs guilty. And by changing the ſuppoſition a little; if we had ſtill the ſame thoughts that we have, but were impeded in the execution of all our evil deſigns, by Almighty God, we ſhould ſtill be equally guilty in his ſight. He who

is hinder'd in the execution of a murder, but had all the propensity, and ill design, that he could have had, to make it take effect, is as guilty on supposition his design does not take effect, as if it did. As to our communicating *physical evil*, or *pain*, to others, by the success of our wicked actions, God is powerful and wise to turn that to the final pleasure or advantage of the sufferers; to bring *order* out of *confusion*, and to prevent the last effects of our malice. We cannot *perplex* affairs, beyond the skill of infinite wisdom and goodness to *unravel*, to speak after our manner; and there is a curb upon us from an invisible hand, in the midst of our career. *God rules*: after which it is want of philosophy to doubt or murmur; or, it is *the ignorance of laying down premises, and then refusing the consequences.*

XXXV. As to the instance above, N° 24. *of the man's shooting the bow*; by far the greatest part of the motion or material action, is immediately produced by the first Mover, equally when the arrow *kills* an innocent person, as when it *prevents* an innocent person from being killed, by the death of a cruel, relentless *Aggressor*. And even in our way of conception, he produceth the material part of the effect justly and unblameably; for in either event he acts by the same *constant* and *equal law* of action; and it is the same thing as to the materiality of the effect produced, as if he had planted powers in matter to produce it, without his own immediate intervention, if that could have been done: for in all other respects it is equal, whether we say *they are planted in it, by the Creator, to co-operate with the spontaneous mover of the body, after a constant, stated manner*; *or are immediately impressed upon it, but after the same constant, stated manner still* (z). Besides, we are unjust in objecting thus, upon this consideration, that whereas

(z) The Reader will be pleased with the following remark made here, by a learned and ingenious person, as it contains an observation both new, I think, and solid. *Our Writers who argue from the beauty of nature, the motions and changes in the world being governed by certain stated laws, ought to shew the use of such laws, and of that constancy which in some particular cases is noxious. And this I take to be the use of it, that free agents could have no foresight or judgment without this constancy. There would be without this no choice or pursuit, because there would be no course of things.* Indeed, if we should suppose a contrary method to obtain, and pursue the consequences of that, in the view which this excellent remark opens to us; what fear and irresolution, what disappointment, confusion, and final disorder might we not apprehend in all human affairs! How much are we indebted to *Providence* for *appointing* and *keeping up* a constant natural course of things, at the same time perhaps that we are inwardly murmuring, that he doth not *change* that *course* in our particular behalf! If the course of nature, and

whereas we aſcribe all the merit of a laudable action to the *ſpontaneous agent* alone, we find fault with the *concurring agent*; if an action unjuſtly deſigned hath its effect. In this we do not conſider that the *very deſign* and *intention* of an evil action is itſelf the *evil thing*, before any effect at all is produced. But farther, if the arrow by an unſteddineſs of hand, or a miſtake of perſons, ſhould wound, or kill an innocent man; or if the innocent is overtaken by ſome inevitable calamity, where no moral agent is concerned; we are to affirm *that this could not come to paſs but for the beſt and wiſeſt ends.* For it is an infallible certainty, *that there exiſts a Being infinitely good and juſt*; and therefore that any creature ſhould be *ultimately unhappy*, by the immediate agency of this Being, or in a world where the power and knowledge of this Being preſides, or *worſe* than another creature *not more innocent*, or than another creature *yet more guilty*, is the greateſt impoſſibility. If we are peremptory in this caſe, and determine that *either there is not a God*, or that *he is not a juſt inſpector of human affairs*, and for this reaſon, becauſe otherwiſe ſuch an innocent perſon would not have been indiſcriminately involved in a ſhip-wreck, or any common calamity with profligate and wicked men; what becomes of our concluſion, if it is only ſuggeſted, that *ſuch a perſon, if innocent, is made ſooner happy, or if not innocent, is puniſhed more lightly*, that is, is *made leſs miſerable, than otherwiſe he would have been?* In ſhort, there is no determining here on the ſide of Atheiſm, without ſuppoſing the point in diſpute, *viz.* That there is no after ſtate. But this only by the by, from the inſtance of ſhooting the bow, and the particular of uniting ſouls to bodies. We ſhall have occaſion afterward to conſider the train of objections which the Atheiſt muſters up.

XXXVI. It will, no doubt, be objected, *That this proof of the immateriality of the ſoul, ſhews at the ſame time the immateriality of the ſouls of brutes, and of every living thing, as well as of the rational ſoul*; ſo that this either

and the ſtated laws of things, were to be ſuſpended, or altered, in behalf of every particular, and according to our ſhort-ſighted views of things; what *contrarieties, abſurditics, impoſſibilities*, muſt the Deity perform to pleaſe us all! We ſhould have *heat, cold; plenty, ſcarcity, &c.* all at once; and the frame of nature muſt yield to execute our revenge. Now whatever inconvenience would happen, in complying with our unreaſonable demands, to all beſides our ourſelves, the ſame would happen *to all*, if the ſettled courſe of nature were ſuddenly interrupted, or had no regularity in it, even though no body deſired it ſhould be thus. *So impoſſible is it to mend God's conſtitution of things!*

proves nothing, or more than ſhould be proved. In anſwer to which it is freely owned, that the neceſſity of an immaterial ſubſtance, in brutes as well as men, is equally certain from what is ſaid here. If we ſhould endeavour to diſſemble it; or if it were a thing that wanted to be diſſembled, the Atheiſt would change ſides, and eaſily prove it upon us. Probably *Cartes*'s opinion *that there was nothing but matter and motion in brutes*, hath been one reaſon among others, why ſo many of late have thought it not impoſſible but that it might be ſo in men. There is indeed nothing more common to be heard than a confident aſſertion *that it is impoſſible to prove the ſoul to be immaterial.* And the proving that it is immaterial in *brutes*, muſt, *à fortiori*, infer that it is ſo in *men*. If the argument had only been urged againſt the *Carteſian* opinion, thoſe who have extended that concluſion alſo to the human ſoul, muſt of courſe have relinquiſhed their cauſe; ſo that more than enough is not proved. *(If truth is at all to be received, all the conſequences of it are to be received; they are likewiſe truth.)* The immateriality of the human ſoul doth not fall, though the ſouls of brutes are at the ſame time immaterial; nor doth the rational ſoul's being *ſuch* depend upon the brute ſoul's being *not ſuch.*

XXXVII. But farther, though both are immaterial, it doth not follow that both are therefore equal, or of the ſame kind of immaterial *Beings*; which the objection tacitly ſuppoſes; or that there are the ſame reaſons why the ſouls of brutes ſhould ſubſiſt after they are ſeparated from their material ſyſtems, as that the human ſoul ſhould. The one's being *rational*, and the other *irrational* is certainly *a ſpecific difference*, which argues *a difference of deſign* in the *Author* of theſe two kinds of immaterial *Beings*; unleſs we would ſay that a Being infinitely wiſe made ſpecifically different *Beings*, and not for different purpoſes. The ſame reaſons do not conclude a ſoul immortal, which conclude it immaterial; and, though the immateriality of it is not againſt its immortality, but rather a ſtrong ſymptom of it; yet without better reaſons, the concluſion would be precarious, and ill ſupported. We are to conclude nothing certain about the immortality of the ſouls of brutes, becauſe we have not evident reaſons to ſupport ſuch a concluſion; and we are to conclude ſomething certain about the immortality of the human ſoul, becauſe we have evident reaſons to juſtify our ſo doing. This is ſurely a right method of philoſophiſing. If ſome great Philoſopher ſhould ariſe, who could ſhew that the ſouls of brutes are preſerved after death, for ſome wiſe purpoſe of the great *Author of nature*,

nature, how could this prejudice the cauſe of the immortality of the human Soul? If this could be done, it would as certainly infer that the *human ſoul is immortal*, as the proving the *brute ſoul immaterial* would certainly prove the *human ſoul immaterial* alſo. It is as far from being true *that all things ſhould be different* in theſe two ſpecies of immaterial ſubſtance, as *that all things ſhould be the ſame.* The Atheiſt takes it for granted, that the laſt of theſe caſes is true; and many good men are alarmed leſt the firſt of them ſhould not be true: but both without juſt grounds. It might be poſſible to conceive ſuch ſtates of the *immaterial ſubſtance* in brutes, after the diſſolution of their bodies, as ſhould contradict no truth, nor infer any abſurdity; and then ſuch ſtates muſt at leaſt be *not impoſſible.* And in what worſe ſtate would the *human ſoul* be for that? Again, if it ſhould pleaſe their Creator to annihilate them, (for otherwiſe it will appear by and by, that all immaterial ſubſtance muſt ſtill ſubſiſt) the human ſoul is in never the more danger of being reduced to nothing: and I hope I ſhall make it appear, that an *infinitely juſt Being* could no more *annihilate* it at death, than an *infinitely powerful Being could effect a contradiction.* In fine, though they ſhould be annihilated, we are never the leſs certain of being continued in our conſcious, intelligent exiſtence, after death, and through never ending eternity: and if they ſuper-exiſt the diſſolution of their material ſyſtems, it muſt be for a *different purpoſe*; a purpoſe as different, at leaſt, as the rational is from the brute nature: *for our common Author can do nothing but what is according to rule and proportion.*

XXXVIII. As to the very loweſt of living creatures, fleas, mites, *&c.* (*a*) what

(*a*) Mr. *Locke*, in his controverſy with the Biſhop of *Worceſter*, cited above, ſays, *But here I take the liberty to obſerve that* [if] *your Lordſhip allows brutes to have ſenſation, it will follow, either that God can and doth give to ſome parcels of matter a power of perception and thinking; or that all animals have immaterial, and conſequently, according to your Lordſhip, immortal ſouls, as well as men; and to ſay that fleas and mites, &c. have immortal ſouls as well as men, will poſſibly be looked upon as going a great way to ſerve an hypotheſis.* Here Mr. *Locke* ſuppoſes, that *ſenſation* implies *thinking* as much as it implies perception; which is quite wrong, I conceive.

Since he wrote, *others* have caught the hint, and brought in the *eels in vinegar*, and other *microſcopical animalcula*, to expoſe the immateriality of ſouls. But when the firſt ſurprize of this novelty is over, and we begin to look where the ſtrength of the objection lies, it diſappears. Muſt it not appear more wonderful to us, to work a piece of mechaniſm in the bounds of a mite, or other animalcule, than in the bounds of a horſe or an elephant? *Infinitely ſmall things ſhew infinity of power, as much as infinitely great things.* In this reſpect then theſe animalcula are as great inſtances of the wiſdom and power of God, as the largeſt living creatures. In the next

place,

what reason is there for refusing them an immaterial spontaneous mover, when we consider that the admirable structure of their little bodies is the work of infinite Wisdom, and that infinite Power vouchsafes to concur incessantly with all their spontaneous motions? Philosophy doth not countenance us in saying *that immaterial substance costs the Creator more pains in making, than matter doth; so that there should be a scarcity of it*; or that it is too good to be wasted, when we see his own wisdom and power so eminently laid out, in so little room. I shall shew in another place, that the faculty called *instinct*, is most remarkable in the lowest, most contemptible *creatures*; and that this *instinct* is nothing but the *immediate direction* and *guidance* of the Divine Wisdom, to supply the power of reason, which these creatures want. And since in the question about the immortality of the soul, the brute-soul is, on all occasions, brought in on a parity with the human, I shall there endeavour to assign the difference between the rational and brute-nature; since it already appears not to be a difference of substances, but of powers belonging to one and the same kind of substance.

place, doth not this mechanism as much require an external immaterial power (see N° 13, 14, 15 of this) as any mechanism whatsoever? And who supplies this? In the last place, they move spontaneously. The objection supposes this. Spontaneous motion is different from mechanical motion, by the terms; therefore it must require a different immaterial principle, (see N° 19, 20.) Where is the difficulty in all this? Or rather in what particular is it not demonstrative? But perhaps the *Authors* who start this objection, imagined it would be unkind not to allow these little animals to be certain *by-blows*, the *effects of chance*, or *of the natural powers of matter*? Or *that infinite power doth not reach to infinitely small things*; but *that this is a field for any bungling cause to work in*? But let us imagine the difference of circulation, and the various laws of œconomy in the various species of these creatures, and we shall conceive of them in quite another light. To which purpose I shall here subjoin a paragraph from Dr. *Keil's Introduct. ad ver. Physic.* lect. 5. *Cum animalculum quodvis sit corpus organicum, perpendamus paulisper, quam delicatulæ & subtiles esse debent partes ad ipsum constituendum, & ad vitalem actionem conservandam necessariæ. Haud mehercule facile concipitur, quo pacto in tam angusto spatiolo comprehendi possint; cor, quod ipsius vitæ fons est, musculi ad motum necessarii, glandulæ ad liquores secernendos, ventriculus & intestina ad alimenta digerenda, & alia membra innumera sine quibus animal esse non potest. Sed cum singula memorata membra sunt etiam corpora organica, alias etiam habebunt partes ad suas actiones necessarias. Constabunt enim ex fibris, membranulis, tunicis, venis, arteriis, nervis & hisce similibus canaliculis numero fere infinitis, quorum exilitas imaginationis vires superare videtur. At his infinitè propemodum minores esse debent partes fluidi, quod per canaliculos hosce decurrit, nempe sanguis, lympha & spiritus animales, quorum in grandioribus animalibus incredibilis est subtilitas.* Is this work for any thing but infinite power! Certainly this objection is ill chosen.

SECT.

SECT. III.

The natural immortality of the ſoul ſhewn from its being a ſimple or uncompounded ſubſtance; what this immortality imports.

AFTER what is ſaid, it might not perhaps be improper to examine the arguments that are generally brought to ſhew the materiality of the ſoul, or the objections againſt its being immaterial, upon which our prejudices make us lay great ſtreſs; for though when a thing is once proved true, we need not much concern ourſelves with what is ſaid againſt it, ſince there cannot be contrary truths; yet (as hath been lately well obſerved) ſince objections founded upon prejudices gain eaſy admittance, and few words ſerve to make them underſtood, it will not be amiſs to take notice of theſe: but this may be done with more eaſe and clearneſs a little farther on. Wherefore, that we may the better underſtand the nature of the human ſoul, let us next conſider the conſequences of its being *a ſimple or uncompounded ſubſtance*; for if it were made up of parts, as matter is, it might be contended that it could naturally be reſolved into theſe parts again, by the action of ſomething or other upon it: whereas if it hath no parts, or is but one ſingle uncompounded thing, we ſhall be ſatisfied in our own way, that it is liable but to one change, or caſualty, *viz.* to be annihilated, or to be deſtroyed by a Being to whoſe power that effect is competent. In order to this, and to help us to get the better of ſome of our prejudices, whereby we are ſtill applying the properties of matter to ſpirit, by which, in propriety we ſhould always mean immaterial ſubſtance (*a*); I ſhall premiſe the following obſervations.

II. No

(*a*) Mr. *Locke*, in his controverſy with the Biſhop of *Worceſter* mentioned above, endeavours to juſtify his uſing the word *ſpirit* for a thinking ſubſtance, without excluding materiality out of it, by the authority of *Virgil* and *Cicero*: where he ſays, —— "Whether they thought right "in this [that the ſoul might be only a ſubtil matter, which might come under the name of "*aura*, or *ignis*, or *æther*], I do not ſay; that is not the queſtion; but whether they ſpoke "properly, when they called an active thinking ſubſtance, out of which they excluded only

II. *No ſubſtance or being can have a natural tendency to annihilation, or to become nothing.* That a being which once exiſts ſhould ceaſe to exiſt, is a real effect, and muſt be produced by a real cauſe: but this cauſe could not be planted in the nature of any ſubſtance, or *Being*, to become a tendency of its nature; for *it could not be a free cauſe*, otherwiſe it muſt be a *Being* itſelf, the ſubject of the *attribute freedom*, and therefore not the property of another *Being*; *nor a neceſſary cauſe*, for ſuch a cauſe is only the effect of ſomething impoſing that neceſſity, and ſo no cauſe at all. *Neceſſary cauſes* and *paſſive powers* deny the thing they ſeem to expreſs. This effect therefore muſt be the operation and efficiency of another *Being ab extra.* One of our prejudices here is, that we imagine *Beings* may have a natural tendency to change their nature: but then their nature would be inconſiſtent, and deſtructive of itſelf (*b*); and the ſame argument may be applied here to the natural ſtate of being, in general, as was applied at N° 14. of the firſt ſection to the ſtate of reſt or motion of matter in particular; ſince that is but one particular caſe of the natural ſtate of being. For a tendency to perſevere in the ſame ſtate of nature, and a tendency to change it, are contradictories, and impoſſible to be planted in the ſame ſubject at once: or (not to urge the contradiction) if the laſt prevailed, the remaining in the ſame ſtate, for any given time, would be impoſſible. We forget the true cauſe of all theſe tendencies, *the will of God*, which it is abſurd to ſuppoſe contrary to itſelf. The tendency in matter to perſevere in the ſame ſtate of reſt or motion is nothing but the will of the Creator, who preſerves all things in their exiſtence, and manner of exiſtence (*c*):

nor

" groſs and palpable matter, *ſpiritus*, ſpirit, *&c.*" But with ſubmiſſion, I think no man ever before defended *the propriety* of an expreſſion, excluſive of *the truth* of it, in a philoſophical controverſy. If the acceptation of a word is ſuch as determines the queſtion, without farther argument, as in this caſe, to juſtify the propriety of it then, is to make the common uſe of language decide in points of philoſophy. If *Cicero* or *Virgil* had wrong ideas as to the immateriality of the ſoul, though they expreſſed theſe wrong ideas right, that doth not mend the matter. The diſpute between the Biſhop and Mr. *Locke*, was, whether matter could think, and not the claſſical acceptation of the word *ſpiritus*.

(*b*) The natures of things are only the ideas in the divine intellect, conſiſtent to be made ſubſiſt together in the ſame ſubject, *extra intellectum*; but the idea of a tendency deſtructive of that nature (*i. e.* of thoſe other ideas) muſt have been inconſiſtent with them; which points out to us the origin of the contradiction.

(*c*) *Deſinant jam Philoſophi continuati motus exquirere cauſam, alia quippe agnoſcenda eſt nulla præter primam illam, quæ non modo motum, ſed res omnes in eſſe ſub conſervat; Deum ſcil. Opt. Max. nec*

aliâ

nor can we have recourſe to another cauſe for the preſervation of immaterial ſubſtance in its exiſtence and manner of exiſtence; taking manner of exiſtence in a larger ſenſe, (becauſe being active it can change the ſtate of its cogitation (*d*). Therefore, as I ſaid, theſe tendencies are originally to be aſcribed to the will of God, and it is abſurd to ſuppoſe them contrary. What we ſuppoſe a *tendency of nature* to a change in material things, is but the *gradual effect of an exterior cauſe*, or immaterial power, working a change in them, as when iron expoſed to the air is gradually conſumed to ruſt, which is miſtaken for a natural tendency, becauſe of the ſlowneſs and imperceptibleneſs of the operation (*e*). Another of our prejudices is, that we argue from a change of accidents of the ſame ſubſtance, to a change of the ſubſtance itſelf, (though a change of ſubſtance is improperly called a change): and becauſe ſome exterior thing is ſtill effecting theſe changes of accidents, in ſuch material objects as we are moſt familiar with, we imagine that immaterial ſubſtance or being may have a natural tendency to decay or become nothing. But methinks we ſhould quit this prejudice, when we ſee, that even this change of accidents of natural bodies is not effected without the concurrence of Almighty power.

III. *No being, though it hath power, can have ſuch power as to annihilate itſelf:* for then it ought to have power to effect that it ſhould have no power, which is contradictory; ſince we are forced to ſuppoſe the thing ſtill remaining, which we ſuppoſe taken away. If a cauſe produceth an effect, it muſt have power to finiſh that effect; otherwiſe it could not be the cauſe of it: and in this caſe if it had power to finiſh the effect, the effect could not be finiſhed, that power ſtill remaining. It is therefore the ſame contradiction to ſuppoſe that a being ſhould annihilate itſelf, as that

aliâ ratione perſeverat motus, quàm quâ continuatur corporis alicujus figura, color, aut aliæ quævis iſtiuſmodi affectionum, quæ ſemper eædem permanerent, niſi vis aliqua externa eas turbaverit. Introduct. ad Ver. Phyſic. Lect. 11.

(*d*) The firſt exiſtence of matter, and every change in the manner of its exiſtence, requires an immaterial Cauſe. And though every change of the manner of the exiſtence of ſpirit, doth not immediately proceed from the power of God, being active itſelf in changing the ſtate of its cogitation; yet the having received this activity ſhews it no leſs dependent on the will of the Creator, than if it were preſerved in one continued ſtate of inactivity.

(*e*) Philoſophers obſerve this is effected by a fermentation, which, by the laſt ſection, is no natural power of matter. "For air (ſays Sir *Iſ. Newton, Opt.* p. 355.) abounds with acid vapours fit to promote fermentations, as appears by the ruſting of iron and copper in it, the kindling of fire by blowing, and the beating of the heart by means of reſpiration.

it ſhould create itſelf; namely, *that it ſhould act when it is not.* Yet we contract a prejudice, which makes us fancy that a *Being* could put an end to itſelf, as when a man gives himſelf a deadly wound. But it is begging the queſtion to ſay that a man annihilates himſelf in ſuch a caſe; and it is from ſuch inſtances only that we contract this prejudice. The ſtrength of the man's arm doth that, which with the ſubſequent efficiency of other cauſes, brings on the end of life; which it is not allowed is the end of *Being*, more than the change of figure or poſition in mattter is the annihilation of matter. In the preſent caſe, by ſuppoſition, no cauſe co-operates, beſides the power of the *Being* itſelf; and there is no tendency to annihilation in the nature of any being without the efficiency of ſome other cauſe, by what was ſaid juſt now, N° 2. But chiefly, by what is ſaid there, it is God who preſerves all things in *Being* and exiſtence: therefore no *Being* can annihilate either itſelf, or any other *Being*, without it were ſuppoſed able to reſiſt infinity of power, which conſtantly preſerves them.

IV. It will be ſaid, ſince finite *Beings* have no tendency to annihilation, there will be need of no power to preſerve them in their natural ſtate. But to this it is anſwered firſt, that any *Being* (this ſtone for inſtance) as exiſting this minute, hath no neceſſary connexion with itſelf, as exiſting the next. This is of the nature of all contingent *Beings*; every minute of their exiſtence is independent of all the reſt, and therefore *muſt depend upon ſomething elſe:* for their exiſtence by the terms, is not abſolutely independent of all things; otherwiſe it would not be *contingent*, but neceſſary. If the exiſtence of a *Being* this minute inferred its exiſtence the next, it would be a phyſical contradiction that any thing that had ever once exiſted, ſhould ever ceaſe to exiſt; and *contingent exiſtence* would be the cauſe of *neceſſary exiſtence*; which is abſurd. And ſecondly, this brings us, by another kind of reaſoning, to what was aſſerted N° 2. and which is the chief anſwer to this objection, That the non-tendency of beings to change their ſtate, or their tendency to perſevere in their *Being* and exiſtence, hath no other cauſe but the *will* of God; and that tendency is but this continued act of his will exerted, and taking effect. It would be abſurd then to ſay, becauſe the tendency of *Beings* to remain in their ſtate of exiſtence, ſuppoſes the conſtant concurrence of the will and power of God; therefore ſuch a tendency ſuperſedes the will and power of God in their actual preſervation: and yet the objection comes juſt to this. We ſaw in the laſt ſection, when ſpeaking of the coheſion of matter, that it is a continual power impreſſed, which conſtitutes

the

the ſolidity of it. And generally, ſince *to will* and *to do*, is the ſame thing to infinite power, *the preſervation* of all things, whether material or immaterial, is the ſame, or equal to *a continued creation*. A continued act of the will is a continued act: a ſuſpenſion of an act of the will is itſelf a poſitive act, (as will appear in the next ſection). And therefore the preſervation of *Being*, and its annihilation, require as poſitive an act, as its creation.

V. Theſe things being premiſed, it appears that all ſubſtance equally, as well material as immaterial, cannot ceaſe to exiſt but by an effect of infinite Power. And the only remaining change it can be liable to from the agency of any ſecond cauſe, is in its accidents, or ſuch properties as are not neceſſary to it, as ſuch a ſubſtance; but which being altered, it remains ſtill a ſubſtance with the ſame fundamental and ſpecific properties it had before; *that is*, ſtill the ſame ſubſtance.

VI. All the changes of this kind, which happen to matter, are effected in it, becauſe it is a ſubſtance compounded of parts, and again diviſible into parts, each of which is a ſolid, extended, diviſible, figured ſubſtance; or hath *the eſſential properties* of the whole, of which it is a part, as much as the whole hath. For in any indiviſible of matter, ſuppoſing ſuch were poſſible, we can conceive no change poſſible: becauſe it would imply a contradiction. It could not be changed in ſolidity or extenſion; that would be to change it in quantity, which could only be effected by adding parts to it, which is no change in itſelf; or by taking parts from it, which by ſuppoſition it hath not. It could not be changed in figure or dimenſions, without a change of the poſition of parts, which it hath not. If it ſhould be ſaid, that it might be changed from reſt to motion, or from motion to reſt, this is no change of this indiviſible conſidered alone, but a change of it conſidered with relation to ſomething elſe; to wit, other parts, the diſtance between which and it is changed. Even in *abſolute motion* nothing is effected but a determination of the inactivity, or reſiſtance, to one part more than another, which is no intrinſic mutation of ſubſtance or ſubſtantial properties (*f*). In ſhort, this indiviſible could undergo no change in itſelf,

(*f*) In abſolute or real motion, the force, moment or reſiſtance, is only determined to one ſide, I think, or receives a particular direction, but is not changed in quantity, unleſs we take it relatively, or with reſpect to a terminus *à quo*. By N° 12. of the firſt ſection, if we fix on ſuch a terminus, the reſiſtance of matter is endleſly increaſible. In receding from the terminus

itſelf, no not from any power, but a change of ſubſtance, or annihilation, which is not a change properly ſpeaking. If the matter of our bodies were ſuch an indiviſible, we could be affected with none of the viciſſitudes we are now affected with; but our material part would be as indiſſoluble as now our thinking part is, which is indeed affected with the changes of the body, but without any fundamental change or alteration in its own ſubſtance.

VII. All the changes then which happen to matter, are effected in it, becauſe it is a ſubſtance compounded of parts, and again diviſible into parts, each of which is a ſolid, diviſible, extended, figured ſubſtance, or hath the *eſſential properties* of the *whole* of which it is a *part*, as much as the whole hath. But ſurely this can never be ſaid of *active perceptive ſubſtance* that it is compounded of parts, which are likewiſe *active perceptive ſubſtances*; we ſhould then have as many different perceptions and conſciouſneſſes as there were different parts of the ſoul: nor could ſuch parts ſubject an active perceptive ſubſtance to mortality, or corruption, though ſeparated; for theſe parts could not be other than active perceptive ſubſtances,

minus of reſt, it may always receive another degree of celerity, and therefore will make another degree of reſiſtance. This is becauſe of the degree of reſiſtance it made to receive that celerity. It could not make two degrees of reſiſtance to be ſtopt, unleſs it had made two degrees of reſiſtance to be put into that motion. So that the increaſe of moment ſuppoſes a previous repetition of equal reſiſtances to equal changes. And therefore this reſiſtance taken abſolutely, is always the ſame, as much as the inactivity is, as in N° 13. of that ſection. However, in caſe one ſhould be tenacious of the contrary, not much depends on this. But having mentioned moment as an affection of real motion in matter, let me be permitted to explain, and reſtrain a little, what Mr. *Locke* hath advanced concerning the motion of all finite ſpirits. In Book 2. chap. 23. ſect. 17 and 18. having enumerated the primary ideas peculiar to *body* and *ſpirit*, as contra-diſtinguiſhed to each other, he makes *mobility* common to them both; which he illuſtrates and defends, ſect. 19, 20 and 21. He hath before aſcribed *motivity*, or a power of putting body into motion by thought, to ſpirit, as one of the ideas peculiar to it; ſo that by *mobility* he ſeems to mean a capacity in ſpirit of being moved, by ſomething *ab extra*, and not the power of moving, which is included in *motivity*; eſpecially ſince he makes mobility common to both matter and ſpirit. Which, with ſubmiſſion, I think is very wrong, and tends to confound the natures of the two ſubſtances he would diſtinguiſh. We ſay a thing is moveable, which can be moved by a force applied *ab extra*: thus a *table* or a *chair* is moveable. And conſequently we call a thing immoveable, which no force applied, or that we can apply, is able to move: thus a houſe or a mountain is ſaid to be immoveable. Now a ſubſtance that no way impedes motion, but effects it, can with no propriety, I think, have the capacity of mobility aſcribed to it, as it is aſcribed to body, a ſubſtance which reſiſts motion, and no way effects it, and therefore wants an external mover. To make ſpirit material, and ſo at once both

ſtances, as much as the whole is whoſe parts they are, any more than the parts of matter could be unſolid or unextended. Parts of any ſubſtance muſt be of the ſame ſubſtance, by the terms, and of the ſame nature with the whole, of which they are parts; differing only from the whole in more or leſs, but not in nature and fundamental properties; otherwiſe *the ſubſtance of theſe parts* would not be the ſame with that of the whole: or they would be parts of the ſame ſubſtance, and not of the ſame ſubſtance, which is contradictory. This is implied, I ſay, by the terms, when we ſay *parts of the ſame ſubſtance*; for that is the ſame ſubſtance conſidered as having parts in it; where, by the ſuppoſition, the ſubſtance, and therefore the ſubſtantial properties in the parts, are the ſame as in the whole. That which adds weight to this reaſoning is, that as it appeared in the laſt *Section*, that activity and perceptivity *can belong only to immaterial ſubſtance*; ſo it ſhall be ſhewn in the next, *that they muſt always belong to it*, or are inſeparable from it. Therefore, if this ſubſtance hath parts, every part muſt be active and perceptive. And the actual ſeparation of ſuch

both to cauſe and hinder motion, is a plain contradiction. Spirit, it is true, ſtops motion; but it is by the ſame *living efficacy*, by which it begins it; not by *a deadneſs and reſiſtance in itſelf to be moved.* Beſides, a ſpirit when it moves, hath no *moment*, as body hath, proceeding from its *vis inertiæ*. It cannot be ſaid to reſiſt being brought from motion to reſt, or from reſt to motion; ſince it effects theſe changes. If it moved circularly, it could have no centrifugal force. When a man walks, his ſpirit moves his body; but is not moved by it. If both were moved, there would be no mover. Nay, even in the journey betwixt *London* and *Oxford*, where the man's ſpirit is not the mover, but the horſes move the coach, his body and all, his ſpirit doth not impede the motion, *or make the draught heavier*; or is not properly a moved. So that, in effect, mobility doth not belong in common both to body and ſpirit. Nor farther, can motion belong to both, but in very different ſenſes. Mr. *Locke* ſays, ſect. 19.——"For having no other idea of motion, but change of diſtance with other beings that "are conſidered as at reſt; and finding that ſpirits, *&c.*" It is true, ſpirits change place, and motion in this ſenſe is competent to all finite ſpirits. But in this motion they are not *moved* but *movers*; which is the diſtinction endeavoured to be *confounded*. Sceptical people conclude from this, that whatever moves is material. But it will not follow that whatever moves, as a mover, is material, and has the relations of matter. *For in the idea of the motion of body, a moved, and not a mover, is implied*; and the affections of *moment*, *reſiſtance*, and *tendency to move in the ſame ſtraight and uniform direction*, are neceſſarily included. Were there but one body in the Univerſe, theſe affections would inſeparably attend its motion; and yet then the relation of diſtance would never ſhew motion. The diſtinction of *ubi* and *in loco*, which Mr. *Locke* obſerves, ſect. 21. to be of little uſe to our conception, was introduced probably, to ſignify that body and ſpirit occupy ſpace after a different manner; though we cannot conceive that difference of manner.

XI

parts,

parts could never be the corruption, or death, of active, perceptive, or living ſubſtance; but rather the generation of many.

VIII. A living ſubſtance could not conſiſt of other living ſubſtances, as a dead ſubſtance may be the aggregate of other dead ſubſtances, upon this farther account. *Deadneſs is a mere negation, and doth not want a principle of individuality*, to reſtrain and appropriate it to any part of the aggregate. It would be abſurd to ſay, the deadneſs of every part is its own particular, or individual deadneſs, which can be aſcribed to no other part; and the deadneſs of the whole is likewiſe its individual deadneſs, which muſt be different from the deadneſs of all the parts. It would be abſurd, I ſay, to ſpeak thus. But activity being a *poſitive power*, wants a principle of individuality; or the activity of any part, muſt as certainly be the power of that part, and not of another, as its ſubſtance is the ſubſtance of it only, and not the ſubſtance of another. Or if we conſider the activity of any part as a property, it muſt have that part, in excluſion of all others, as the ſubject of its inheſion. And we may reaſon the ſame way with the perceptivity. If every part were perceptive, nothing could hinder the perceptions from being different, and as many as the parts. Thus neceſſarily there would be a confuſion and multiplicity of different activities and perceptivities in active perceptive ſubſtances that conſiſted of other active perceptive parts. And if we can ſtop at theſe parts, of which we have been ſpeaking, it is well: but if we are forced to allow of active perceptive ſubſtances that do not conſiſt of parts; why ſhould we contend at all *for parts* in ſuch ſubſtances from the beginning? And if we contend *for parts* at all, what reaſon can there be given for ſtopping at theſe parts, and not contending for other and other parts *in infinitum*, which will make the abſurdity monſtrous? And in either caſe, the activity and perceptivity *of the whole* could never be one ſimple and uncompounded activity and perceptivity; or be individual *to it*, in oppoſition *to the parts*: but contrarily, the activity and perceptivity *of each part* would have its principle of individuality *in that part*, in oppoſition *to the whole*; and all together, they would appear various, confuſed, and divided; and *one individual living being* could never reſult from them. If it ſhould be ſaid, that the activity and perceptivity *of each part* would not be different from that *of another*; it is as if we ſhould ſay, the ſubjects of inheſion of theſe properties would not be different the one from the other, or that theſe parts are but one and the ſame part, or that the ſoul is not made up of parts, or *is indiviſible*.

IX. The parts of active, perceptive ſubſtance, if it could have any, muſt be alſo active and perceptive from this conſideration, that to ſuppoſe it otherwiſe is to allow *that activity and perceptivity may reſult from the joining together dead inert parts*; which is the ſame contradiction, whether we allow it in material or immaterial ſubſtance: for it is to make the effect perfecter than the cauſe, by ſuppoſing perceptivity and ſpontaneity both of motion and thought, and reaſon itſelf, to ariſe from the *mere addition*, or *junction*, of things dead and inert, to other things equally dead and inert. We ſhall ſee, when we come again to ſpeak of Mr. *Locke*'s *ſuperadded property* of life, ſenſe, and ſpontaneous motion, that it could have no ſubject of inheſion, beſides the mere junction of dead parts to dead parts: but that *junction* or *addition*, which is itſelf a property, ſhould be the ſubject of another property, is againſt ſenſe and reaſon. Therefore again, if an active perceptive ſubſtance can have parts, they muſt of neceſſity be active and perceptive. And if theſe parts are indiviſible, we are at length come to indiviſible living ſubſtances; and as ſuch, not liable to any change except annihilation. But he who contends, that living ſubſtance muſt be compounded of parts, cannot conſiſtently with himſelf be ſuppoſed to ſtop any where, but muſt rather aſſert that theſe parts are ſtill diviſible into other parts: in which caſe he muſt likewiſe ſay, that each part, in any diviſion, or ſubdiviſion, is active and perceptive, for the reaſon juſt now aſſigned, *viz.* becauſe otherwiſe the whole could not be active and perceptive. This would be to multiply living beings endleſly, inſtead of ſhewing that they are mortal and corruptible. Nor could he make an *individual living ſoul* out of a compoſition of theſe. The conſciouſneſſes reſulting from the activity and perceptivity of each part would be various and infinite. From what is already ſaid, we cannot be at a loſs for an anſwer, if any one ſhould be ſo humourſome as to ſay, that active perceptive ſubſtance may be compounded of diſſimilar parts, ſome of which only are active, and others inert: for the firſt ſort only, ſecluding the laſt, would be active ſubſtance.

X. Thus a living ſubſtance made up of dead parts is a contradiction; and a living ſubſtance made up of living parts, is not one living ſubſtance, but as many diſtinct living ſubſtances, as there are diſtinct living parts in it. And indeed this compoſition and diviſibility of living ſubſtance muſt infer the ſame conſequences, as if we ſuppoſed matter a

thinking living ſubſtance: the ſame multiplicity, or rather infinite variety of conſciouſneſs and perception, muſt be as well in the one caſe as the other. But this is not only falſe, as plainly appears from the ſimplicity of our conſciouſneſs and perception, but cannot poſſibly be of any ſervice to thoſe who aſſert the ſoul's mortality; for ſince every part muſt be a living part into which either ſubſtance, be it matter or ſpirit, is diviſible, becauſe a living whole could never be made up out of any number of dead parts. They muſt neceſſarily of courſe by this ſuppoſed diviſibility, multiply living beings without end, or at laſt ſtop at indiviſible living ſubſtances, which are liable to no eſſential alteration, and can never ceaſe to be by any other means than annihilation. And from hence it follows, that parts and diviſibility are not affections conſiſtent with active perceptive ſubſtance, which muſt be one, and ſimple, without compoſition. *Diviſibility* is ſuch an affection of ſubſtance, as ſhews on the one hand, that matter, becauſe diviſible, cannot think, or be a living ſubſtance; and on the other, that ſpiritual ſubſtance, becauſe thinking, cannot be diviſible, or have parts.

XI. The human ſoul then, having no parts, muſt be indiſſoluble in its nature, by any thing that hath not power to deſtroy or annihilate it. And ſince it hath not a natural tendency to annihilation, nor a power to annihilate itſelf, nor can be annihilated by any *Being* finitely powerful only; without an immediate act of the omnipotent Creator to annihilate it, *it muſt endleſly abide an active perceptive ſubſtance, without either fear or hopes of dying through all eternity.* Which is, in other words, to be immortal as to the agency of all natural, or ſecond cauſes; *i. e.* naturally immortal. And this is the immortality which the Atheiſt, and really in the general what all men inſiſt moſt upon. We inſiſt to have it proved in our own way; and demand that it may be ſhewn immaterial, ſimple and uncompounded in its nature, as a pledge and ſecurity that it is never to die. *Lucretius* places the mortality of it in its being material; and when he imagines he hath proved that, he adds, as the criterion of immortality, that ſuch a ſubſtance muſt be ſimple without parts, becauſe a change or loſs of parts is the death of that thing (*g*). It is true, the immateriality

(*g*) *At neque tranſferri ſibi partis, nec tribui vult,*
Immortale quod eſt quicquam: nec diffluere hilum;
Nam quodcunque ſuis mutatum finibus exit,

Continued

materiality of the ſoul is a ſatisfying pleaſant contemplation, eſpecially when we perceive that it is impoſſible that ever matter can become active or percipient, by any power, or in any the leaſt degree; and in conſequence of this diſcovery come to the knowledge of ſeveral other moſt weighty and uſeful truths: but were there not more direct and proper proofs, the endleſs duration of the human ſoul would remain precarious. The Atheiſt artfully ſeeks the leaſt direct and remoteſt kind of proof; both becauſe he thinks it hardeſt to be given, and becauſe, when given, it proves not enough; for if that only could be given, he would not want other ſubterfuges, the laſt of which I ſhall endeavour to prevent in the next ſection. Indeed the neceſſary perfections of the Deity, which ſtand engaged for, and demand our appearance in a ſecond period; and the nature of our rational pleaſures and deſires, which ſhew that we were deſigned by an infinitely rational Being for endleſs exiſtence, are the things that give the ſanction of demonſtration to the immortality of the ſoul. No very great ſtreſs could elſe be laid upon the ſimplicity or diviſibility of its ſubſtance; ſince ſurely we may ſay, it would be as eaſy for Omnipotence to deſtroy a ſimple ſubſtance, as for ſecond cauſes to diſſolve a compounded one. Let it be conſidered, that immateriality is as certainly competent to the ſouls of brutes, as of men: but the arguments proving the laſt immortal, from the rational nature, and the neceſſary perfections of the Deity, are altogether incompetent to them. And it hath been the conſtant endeavour of the Sceptic to ſhew a parity, and run a parallel, between theſe two ſpecies (*b*). Beſides, from what hath been ſaid in the laſt

Continuò hoc mors eſt illius quod fuit ante.

Lib. 3. ver. 516.

And after at ver. 807. he ſays,

Præterea quæcunque manent æterna, neceſſe eſt,
Aut quia ſunt ſolido cum corpore, reſpuere ictus,—
Aut ideo durare ætatem poſſe per omnem,
Plagarum quia ſunt expertia; ſicut inane eſt,
Quod manet intactum, neque ab ictu fungitur bilum.

(*b*) And many good men (as was ſaid in the end of the laſt ſection) are needleſly terrified leſt every thing ſhould not be different in theſe two ſpecies; hence they fight againſt the immateriality of brute-ſouls, as *the moſt dreadful phænomenon* philoſophy could diſcover. Thus a learned and pious Author (ſee the Book called *The procedure, extent, and limits of human Underſtanding*, p. 173, 174.) ſays, "They who hold ſenſitive perception in brutes to be an argument "of the immateriality of their ſouls, find themſelves under a neceſſity of allowing thoſe ſoul-

laſt ſection, it is plain, that even compounded, or material ſubſtances, are not diſſolved, and much leſs could they be deſtroyed, without the immediate

" to be naturally immortal likewiſe: and they are ſo embarraſſed in thinking how to diſpoſe " of thoſe irrational immortal ſouls after the diſſolution of their bodies, and what ſort of im- " mortality to conceive for them, that they imagine them all to return to the great ſoul or " ſpirit of the world; or by a metempſychoſis to paſs into the bodies of ſucceeding ani- " mals; and then when they have done their work, at the end of the world, they are to be " diſcharged out of Being, and again reduced to their primitive nothing." Let me aſk, if this be a good argument, that we are not to allow brutes to be actuated by an immaterial ſubſtance (though reaſon evinces it) becauſe we cannot tell how the Creator diſpoſes of theſe ſouls, after the diſſolution of their bodies? *Why ſhould any man embarraſs himſelf about this?* Cannot the thing be done without his contrivance? Or when their little bodies were formed with ſuch inexpreſſible art and power, was this point left to the determination of Philoſophers? Here it is forgot that by natural immortality, no more can be meant, than that a being ſhould exiſt as long as God doth not extinguiſh it; or as long as he ſupports and preſerves it: and thus there's no being but what is naturally immortal. Even our bodies might be thus immortal, God ſo willing it. Nay, otherwiſe there is no being at all but what is naturally mortal. By natural immortality cannot be meant that any being of itſelf, and abſtracting from the will and concurrence of God, would remain for ever. No being is thus immortal. How abſurd is it, when all immortality is founded on the *will*, and *deſign* of God, to ſeek for a demonſtration of it *in the nature of the created Being itſelf!*

The Author continues, " But if theſe ſouls are once granted to be immaterial, it is utterly in- " conceivable that they ſhould not naturally have the ſame immortality with thoſe which are " human; ſince we cannot with any ſenſe or conſiſtency diſtinguiſh two different kinds of " immortality for created ſpirits. If the ſoul of brutes is immortal, that cannot, when ſe- " parated, be thought to remain altogether in a ſtate of utter inactivity and inſenſibility, " which communicated ſenſe and activity to matter while in conjunction with it. And if ſo, " they muſt be ſenſible of happineſs or miſery; and, in ſome degree, liable to rewards and " puniſhments as eternal as their ſouls." Here let me obſerve, that *the human ſoul being rational, and the brute ſoul not, the one a moral agent*, and *the other not*, is the foundation of a very conſiſtent and ſolid diſtinction, I conceive, between the one and the other, *as to immortality*; ſo far is it from being utterly inconceiveable! Here *immortality* ſeems wholly founded upon *immateriality*, which is extremely wrong. Beſides, an agent not moral, though capable of pleaſure or pain, is not capable of rewards and puniſhments, by the very terms, I ſuppoſe. Moreover, brutes have not the nobleſt kind of activity, even here, in a ſtate of union; *viz.* the command over their paſt perceptions; and ſo this Author cannot argue for that ſpecies of activity in their ſoul when ſeparated. That which communicated activity to matter when in conjunction with it, cannot indeed be utterly, nor any way, inactive, when ſeparated from it. But if this be ſo with reſpect to the brute ſoul; why is it all along ſaid with reſpect to the human ſoul by this Author, *that thought and perception is the joint action of matter and ſpirit in eſſential union*, as he chuſes to expreſs it? He who allows *thought* to be the action, or effect of matter (though but as a partial cauſe, or co-efficient) will hardly be able to prove the neceſſary activity of ſeparate ſpirits. He concludes, " What heightens the abſurdity of this way of

" thinking

diate power of God: and *natural agency*, or *the natural powers of matter*, is (like chance) only a name for our ignorance, or at leaſt for our inat-

tention

" thinking is, that in imagining the ſouls of brutes to be immaterial, men muſt neceſſarily di-
" ſtinguiſh a great variety of them both in nature and degree; one ſort for birds, another for
" beaſts, and another for fiſhes. And theſe muſt be all ſubdivided again into very different
" ſpecies of immaterial ſouls, according to the different ſorts there are under each of theſe
" general heads. Nay, every fly and inſect muſt on this ſuppoſition have ſome ſort of im-
" material ſoul, even down to the cheeſe-mite; and what is yet more abſurd is, that there
" muſt be an infinite variety of immortalities imagined to ſuit the rank and condition of
" every individual, living, ſenſible creature." No certainly (ſay I) not one ſpecies of immor-tality needs be imagined, but all left to the wiſdom and power of the Creator, who, as hath been obſerved before, doth not diſdain to manifeſt the wonders of his knowledge and power in the narrow bounds of theſe inſect-bodies, nay, to actuate their ſurprizing mechaniſm continually. We are not ſo much as certain of their immortality; for the immateriality, from which it is here inferred, is not concluſive; unleſs this Author ſhews how. And when he hath done that, he will have done no harm to philoſophy. Laſtly, why is the abſurdity ſo much heightened by different ſpecies of immaterial ſouls, more than by different ſpecies of material bodies? There is really no abſurdity here but this, that we chalk out a method for Omnipotence; and then reckon every deviation from that method abſurd; and ſo, if matter of fact did not convince us, we might prove the exiſtence of ſo many different ſpecies of material bodies impoſſible. What is here ſaid to heighten the abſurdity, *viz.* that men muſt diſtinguiſh a great variety of immaterial ſouls both in nature and degree, for inſects, fiſhes, birds and beaſts, ought rather perhaps to be looked upon as a very great beauty of the creation, and that which ſhews *the riſing ſcale of immaterial beings maintained.* It would be a wide gap, if there were nothing between dead matter and the *human ſoul*; when we ſee ſuch a *gradation* of workmanſhip and perfection maintained from rude, unformed earth, through all the ſpecies of plants and animals, up to the *human body*. And ſince the ſcale of immaterial Beings is thus carried up to the human ſoul, it cannot certainly end there.

Another late Author, I think, ſpeaks more rationally, (Dr. *Thomas Burnet's Demonſtration, &c.* p. 92) ——" Hence, ſays he, it will follow, by neceſſary conſequence, that every ra-
" tional, ſenſible, and living creature muſt be endued with ſome immaterial principle, which
" is the cauſe of all their rational, ſenſible, or animal operations, *&c.*" And below, — "Thus
" much we may ſay with ſafety, that it is not inconſiſtent with reaſon, that there may be ſeveral
" degrees and orders of immaterial beings, with different powers and faculties, according to their
" different ends; and that ſuch of theſe as are made to actuate bodies, may be put into different
" bodies, according to their different capacities; and when the immaterial beings are ſeparated
" from theſe bodies, ſo that the bodies are dead, it is not inconſiſtent to imagine, that they may
" tranſmigrate into other bodies, and when they have finiſhed that courſe they were made for,
" they may either at laſt be annihilated, or if they are capable of any reward, God may
" have provided proper recompences for them, according to their ſeveral natures and capa-
" cities. There is nothing in all this but what is reaſonable." Now if even we can con-ceive more ways poſſible, and not inconſiſtent, how they may be diſpoſed of; where is the

abſurdity

tention. If then, without his act, a hair could not fall from our head, which is true in a literal and phyſical ſenſe; our ſouls, though compounded, muſt endure for ever, without his act to diſſolve them.

abſurdity conſequent upon allowing them to be immaterial? *Though*, as this laſt Author well obſerves a little before, *it is none of our buſineſs to determine what becomes of them after death.*

We ſhould never diſſemble any truth for fear of its conſequences. It is directly impoſſible that truth ſhould have any bad conſequences. The things we are afraid of may be but our own particular prejudices; and I think it is ſo in the preſent caſe, with reſpect to the immateriality of the brute ſoul. Beſides, if we deny theſe to be immaterial, we deny the moſt convincing argument for the immateriality of the human ſoul, taken from the neceſſary inactivity of matter. And thus this learned and pious Author, while he is zealous to eſtabliſh the immortality of the ſoul, becauſe of its being immaterial, goes in effect a great way to deny that very immateriality; and thus ſeems to defeat his own deſign. The ſceptick, though he is never conſiſtent with himſelf, is yet very clear-ſighted to diſcover theſe inconſiſtencies in his Adverſaries; and fails not to improve them to his own purpoſes.

SECT. IV.

That the ſoul after death is not in a ſtate of inſenſibility, torpor, or deadneſs; but muſt ſtill remain an active living being, when ſeparated from the body. The controverſy between Mr. Locke, *and his adverſaries conſidered, whether the ſoul thinks always,* &c.

WE ſhall ſtill ſee farther into the nature of the human ſoul, and be the better able to deal with ſceptical objections; if we next examine, whether it is neceſſarily active and perceptive, ſo that activity and perceptivity are inſeparable from it. This hath been aſſerted above, at N° 7. of the laſt ſection, where the argument in part depends on the proof of it: and though it is but the juſt conſequence of what is already ſaid; yet ſince we oftner reflect upon the ſeeming ſtate of inactivity and imperceptivity, which the ſoul is ſucceſſively thrown into, while joined to the body, and rather draw our gueſſes about its power and life in a ſtate of ſeparation, from theſe, than conclude from juſt reaſoning

ſoning concerning the nature of ſuch a ſubſtance; it will be neceſſary to be particular in this point. And leſt an ambiguous uſe of words, not importing preciſely the ſame thing, ſhould perplex this matter, it is to be obſerved, that by *activity* and *perceptivity*, can only properly be meant, a *power* of acting and a *capacity* of perceiving, (or let both theſe be called ſometimes powers, to ſave words); and by being active and perceptive, is meant the exerciſe of theſe powers, or real action and perception: though perhaps this diſtinction hath not been exactly obſerved before, where it was conceived nothing depended upon it. And firſt let us conſider, whether the ſoul hath the powers themſelves, in a ſtate of ſeparation; and, if it hath, whether it then exerciſes them; and laſtly, whether it neceſſarily exerciſes them then, or cannot be *not-active* and *not-percipient*, ſo to ſpeak, when either entirely ſeparated from matter, or joined to a ſyſtem of matter always rightly diſpoſed.

II. Now that a ſubſtance having the power of action, while joined to another dead ſubſtance, as the ſoul hath while joined to the body, by what is ſaid, ſect. 2. ſhould only have this power while joined to that dead ſubſtance, and be deprived of it when ſeparated from that, includes this plain contradiction, that a ſubſtance having (ſeparately) no power to act, by being joined to another ſubſtance, having alſo no power to act, (which is true of the body univerſally) acquires a power of action, and exerciſes that power. Which is the ſame thing as to ſay that this power is an effect, and yet of nothing; *for the uniting together of two powerleſs ſubſtances can never be the cauſe of this power.* It will be needleſs to reply, that two inactive ſorts of matter, or liquors, by being united, or mixed, will act, ſtir, or ferment; ſince it hath been ſhewn above, *(ſect.* 1. N° 14, 15, *&c.* and *ſect.* 2. N° 3, 4, 5, *&c.)* that inſtances of this kind are the effect of ſomething not matter, an immaterial power immediately impreſſed. The mutual action of the particles on each other in all ſuch inſtances, ſhews their inertneſs, or reſiſtance to a change of ſtate, and *an inert active* particle of matter is a glaring contradiction. Beſides that in all ſuch caſes, a prodigious force is exerted by the leaſt particles, which is directly againſt the poſſibility of their being the mechanical cauſe of ſuch force themſelves, as hath at large been ſhewn *(a)*. Beſides, there is no arguing

(*a*) Let the following inſtances be conſidered in this light (Sir *Iſ. Newton*'s *Opticks*, p. 352.) " And when water and oil of vitriol poured ſucceſſively into the ſame veſſel grow very hot in

2 " the

arguing for the possibility of a contradiction, such as *that two powerless substances should beget power between them by being united.* If two substances, both without power by supposition, when separate, should, by their union, beget power, it would be no longer impossible for matter to think; for the inactive parts of the same substance might as well become active by being joined, as two different substances both inactive. It is the want of power in the things themselves that makes the contradiction, not their diversity. How surprising then is our general prejudice and inattention! Though power is the perfectest and most precious thing in the world, and nothing could be a cause without it, nothing could make up the loss of it, if it were deficient; yet we think nothing easier to be found, or to be supplied! We allow, for instance, that two dead substances may procreate this essence of nature (so to call it) between them! And what wonder is it then, if we turn Atheists and Sceptics; committing such an outrageous violence on our reason; on truth! It is what is called a circle in reasoning, and a circle of causation, to make the body, that lives by the soul, the cause of life to the soul (*b*): and it is no less an

" the mixing, does not this heat argue a great motion in the parts of the liquors? And does not " this motion argue that the parts of the two liquors in mixing coalesce with violence, and by " consequence rush towards one another with an accelerated motion? And when Aqua fortis or " spirit of vitriol poured upon filings of iron, dissolves the filings with a great heat and ebul- " lition, is not this heat and ebullition effected by a violent motion of the parts, and does " not that motion argue that the acid parts of the liquor rush towards the parts of the metal " with violence, and run forcibly into its pores, till they get between its outmost particles, and " the main mass of the metal, and surrounding those particles loosen them from the main mass, " and set them at liberty to float off into the water?" To read this lively description, it would appear that *these small particles* set about their work, like so many *little engineers*, and demolish one of the hardest metals we know, which the grinding between solid rocks could never perform. It is even obvious to common sense, whatever hath been thought hitherto, that it is impossible this should be the effect of sluggish things, imperceptible for their littleness, without an immaterial power exerted in them. If they perform this by moment or force, it is plain they resist the impression of it: if they are attracted at a distance, it is the demonstrable effect of immaterial power. See the last part of the note (*x*) N° 11. sect. 2.

(*b*) This argument is set in a fair and true light, by *Cyrus* in his dying speech to his sons, (apud Xenoph.) Ὅυτοι ἤγαγε, ὦ παῖδε, (says he) οὐδὲ τοῦτο πώποτε ἐπείθην, ὡς ἡ ψυχὴ ἕως μὲν ἂν ἐν ζωτῷ σώματι ᾖ, ζῇ· ὅταν δ' τούτῳ ἀπαλλαγῇ, τέθνηκεν. Ὁρῶ γὰρ ὅτι τὰ ζωτὰ σώματα, ὅσον ἂν ἐν αὐτοῖς χρόνον ᾖ ἡ ψυχὴ, ζῶντα παρέχεται· οὐδέ γε ὅπως ἄφρων ἔσαι ἡ ψυχὴ, ἐπειδὰν τοῦ ἄφρονος σώματος δίκα γένηται, οὐδὲ τοῦτο πέπεισμαι. Ἀλλ' ὅταν ἄκρατος καὶ καθαρὸς ὁ νοῦς ἐκριθῇ, τότε καὶ φρονιμώτατον εἰκὸς αὐτὸν εἶναι. κ. τ. λ. Both these arguments ought to be got by heart. The whole speech is divine.

absurdity

abſurdity to make them mutually the cauſe of life and thought to each other. Wherefore we muſt ſay, that the ſoul hath the power of action, when not united to the body; or after it is ſeparated from it.

III. This truth may be alſo made appear thus. Since it hath been ſhewn that matter is a dead ſubſtance in all reſpects, it follows that immaterial ſubſtance, or the ſoul, is the *only thing* in us that hath active power. And ſince it hath active power, that power muſt inhere in it, as in its ſubject; or the power muſt belong to the ſoul, *as a property of its nature.* It cannot belong to the ſoul as a mere accident; for (once more) power cannot be produced by accident, (or a Being cannot be endued with power by accident;) otherwiſe we ſhall never be able to ſtop any where; all power might be thus produced by accident, and we muſt give up the *principles of reaſoning.* And ſince *active power* muſt belong to the ſoul, as a property of its nature, that property cannot be ſeparated from it; without deſtroying its nature altogether. For certainly power is the greateſt perfection of any Being as the want of power is the greateſt imperfection. And a Being cannot be deprived of the greateſt perfection of its nature, without having its nature altogether deſtroyed. Thus active power could no more be ſeparated from the ſoul, without an act of Omnipotence to deſtroy its nature, than ſolidity (or *inactivity)* could be ſeparated from matter, without an act of Omnipotence to deſtroy the nature of matter. And a man cannot demand a ſtronger proof of this point in reaſon and philoſophy; for we cannot go beyond the *natures of things*; or beyond *that power* which is the origin of the natures of things, without demanding that the ſoul itſelf ſhould be independent. All that men want is to be ſatisfied that power belongs to the nature of the ſoul itſelf, in oppoſition to its belonging to matter. And indeed it is abſolutely neceſſary that, as one ſpecies of ſubſtance [matter] is utterly inactive, by its nature and conſtitution; ſo another ſpecies of it [ſpirit] ſhould have activity and power, by its nature and conſtitution. This, I ſay, is abſolutely neceſſary; otherwiſe *we ſhould make activity and power a mere accident in nature*, which is prodigiouſly abſurd. Wherefore we muſt ſay (as before) that the ſoul hath the power of action, when not united to the body; or after it is ſeparated from it.

IV. If the ſoul hath the power of action when not united to the body, it muſt certainly have the capacity of perceiving then alſo: for to be active, without being percipient of the action, is to be active, not from an *internal principle*, or the power of action, but from *mechanical neceſſity*, impoſed by ſomething from without. To be active implies the *will* to act. If any thing acts without willing the action, it either acts againſt its will, and then it is a percipient conſcious *Being*; though rather forced than willing, in this caſe: or if it cannot have will either for or againſt the action, it is a *mechanical inſtrument* of action only, and no agent. Indeed activity imports to be living, and life without perception is not to be conceived: ſo that activity includes perceptivity in itſelf; and whatever neceſſity there is for the ſoul's being active in a ſeparate ſtate, the ſame there is alſo for its being percipient then (*c*).

V. But farther, if the ſoul hath the power of action in a ſtate of ſeparation, we muſt ſay that it hath it *always*, and without interruption, ſince it hath it *in itſelf*, and independent of matter: nor can any the leaſt ſhadow of reaſon be conceived, why it ſhould have it at one time, and not at another; or become endued with the power of action by fits and ſtarts. And indeed, though the exerciſe of the powers of activity and perceptivity may be frequently interrupted, by the indiſpoſition of the body, with which the ſoul is cloſely united; yet it is impoſſible that it ſhould at any time be without *the powers themſelves*, even in a ſtate of union with the body; or ſo be, at any time, that it could not act and perceive, if the indiſpoſition of the body were taken off: for that is meant by having the power, but not the exerciſe of it. However, let us ſuppoſe that it were ſo. If the ſoul at any time, while it is united to matter, were in a ſtate of total inactivity and imperceptivity, it would be in a

(*c*) We ſee ſome inferior creatures, that do not change place, almoſt quite diveſted of active power, whoſe perception is yet indefinent. And if we will reaſon from our own experience, our active power is much more liable to be impaired, than our perceptive capacity. If we cannot have activity or lay it aſide, at our pleaſure, as will ſtill appear more plain in going on; common ſenſe dictates to us, that it is ſtill leſs in our power to have a capacity or lay it aſide, at pleaſure. Perception is often more intenſe, or heightened, where the active power is weakened, with reſpect to our bodies; and becauſe it is weakened, as in a gouty limb. In ſhort, the very loweſt kind of life ſeems to conſiſt in the perceptive capacity: ſo that we can never imagine this removed from a living Being. Theſe ſeveral conſiderations may help us to overcome our prejudices in this particular.

ſtate

ſtate of *deadneſs*, as much as matter itſelf, which never had, and never can have theſe powers; and it would be impoſſible for it to recover itſelf out of ſuch a ſtate; juſt as it is impoſſible for any thing that never had life, to make itſelf living. If it could recover itſelf, it muſt be by an act of the will, *i. e.* it muſt will its own recovery: but this is plainly contradictory; for that would infer that it was previouſly recovered, ſince it had the power of willing, that is, of action. Nor could it recover itſelf without an act of the will; for recovering itſelf, by the terms, ought to be its own act: but to act without willing the action, is not to act, as was ſhewn juſt now. In a word, to recover itſelf, is to exert the power it is ſuppoſed to want. And as it could not recover itſelf from this ſtate of deadneſs, ſo neither could it be recovered from it by the dead matter of the body, which is the only refuge our prejudices can have recourſe to, for kindling up new life in the ſoul. This would be ſtill to incur the former contradiction of ſuppoſing *two powerleſs ſubſtances to procreate between them the power of action.* It is in itſelf the moſt expreſs contradiction, that one dead ſubſtance ſhould make another dead ſubſtance living. And there is no other cauſe here comes in queſtion, on the Sceptic's ſuppoſition, beſides two dead ſubſtances. To call in the aid of *a creating power*, to refurniſh the ſoul with life, would be to give up his plea. Every thing muſt be contrary then to what he contends for. If then at any time the ſoul, while united to matter, were in a ſtate of *total* inactivity and imperceptivity, it would be in a ſtate of *final* inactivity and imperceptivity, and the creature would be dead in all ſenſes. Therefore we muſt ſay that in the time of the deepeſt ſleep, or the greateſt bodily indiſpoſition, the ſoul retains the powers of action and perception, as much as when it exerciſes them, or is really active and percipient. And if this be ſo while the ſoul is united to dead matter, which ſo far affects it, as to impede the exerciſe of theſe powers; it muſt be ſo *à fortiori*, in a ſtate of ſeparation. Wherefore, as before we were forced to own, that activity and perceptivity belonged only to immaterial ſubſtance; ſo now we muſt own that *they belong always to it, or are inſeparable from it.*

VI. Since the ſoul hath the power of activity, and the capacity of perceptivity, in a ſtate of ſeparation from matter, it muſt alſo exerciſe that power, or be really active, and really percipient in that ſtate. For firſt, as to *activity*; to give the ſoul a power of action always, and to deny it the

exerciſe of that power always, unleſs it be united to dead matter, is to deny it the power of action, unleſs it be thus united to dead matter; which is to make this power the effect of its being united to dead matter; or elſe it is trifling about words, to give it the power of action, and yet make it want *another power* to exerciſe that power. At that rate, it muſt have a third power to exerciſe the ſecond; and ſo on. If it hath the power in a ſtate of ſeparation, but never exerts any action; it muſt be either from defect of power, or defect of will. To ſay that it is from defect of power, is a contradiction in terms: it hath been ſhewn to have it always. If it be ſaid, that it doth not exerciſe the power for want of will, it muſt *will* the not exerciſing it; which is alſo a contradiction in terms: for this very willing (or rather nilling) is exerciſing it; ſince *to will* implies both action and perception. And it cannot be ſaid that it doth not *will* at all, for or againſt the exerciſing it: for a Being that doth not exert an action, and yet hath the power at all times, muſt be free to exert it, or not. But that a free Being ſhould do one of two things, about which its freedom is converſant, without an act of the will, is againſt the nature of freedom. Exerciſing freedom without willing, is as much as to ſay, exerciſing it mechanically, neceſſarily, or without freedom; which is contradictory. Wherefore the ſoul really acts, ſometimes at leaſt, in a ſtate of ſeparation, as was aſſerted. As to the *capacity of perceiving*, the concluſion is ſtill more plain. We have this capacity at all times; and are really percipient ſometimes, becauſe active. In perceiving we are purely neceſſary and paſſive, or it is not in a living Being's power to become impercipient at pleaſure, more than to become dead at pleaſure; perception is the very loweſt ſtate of living. Wherefore (abſtracting from all impediments and obſtructions, which are removed in a ſtate of ſeparation) we cannot conceive perceptivity to conſiſt in the *bare capacity*, without the creature's being actually and indefinently percipient.

VII. Farther therefore, the ſoul not only acts and perceives ſometimes, in a ſtate of ſeparation from the body, but *it always acts and perceives in that ſtate:* or, ſuch is the nature of active perceptive ſubſtance, that it cannot *not* act and perceive in that ſtate. The reaſons for this aſſertion (beſides what hath been juſt now ſaid concerning perceptivity) are, firſt, That we find it is under this neceſſity, even while united to the body, if the body is rightly diſpoſed. It is not in a waking man's power to baniſh action and perception from him. This would make ſtrange work in the

world *(d)*. And the more he endeavours to do it, the more will he defeat his own deſign. The only way for him to accompliſh this, is to render his body indiſpoſed, by fatigue, liquor, or ſome other method. It is eaſy to obſerve, and ſhall be ſhewn when we come to enquire into the pains and pleaſures of the body, that we cannot command ſleep at our pleaſure; ſuppoſing it for the preſent to be an inactive impercipient ſtate of exiſtence, though it will appear below, N° 23. that we cannot be ſure that ever it is ſuch. We muſt wait till the body hath run itſelf into diſorder, or we muſt induſtriouſly procure it diſorder. Since then the ſoul is under a neceſſity of being active and percipient, when the body is rightly diſpoſed; it follows, that if the body were always thus diſpoſed, it ſhould be always under that neceſſity: or, that it ſhould always be active and percipient, even while united to dead matter, if this ſyſtem of matter were liable to no irregularity and diſorder. Now, ſince the body cannot give it leſs impediment in acting and perceiving, even when beſt diſpoſed, than *none at all*; and ſince, when ſeparated from the body, it hath juſt this degree of impediment from it, *viz.* none at all; it follows that it muſt be then under an equal neceſſity at leaſt, of acting and perceiving, as when, in a ſtate of union with the body, the body is beſt diſpoſed. If it ſhould be ſaid that, beſides the advantage of having no impediment at all from the body, in acting and perceiving, it muſt have another, *that of having its perceptivity excited, by the action of ſomething external to it*; otherwiſe it would not be percipient then; and that the matter of the body, when rightly diſpoſed, doth this by acting upon it: it is anſwered, that this is ſtill to ſuppoſe it *not percipient in itſelf*, but rendered ſuch by being united to dead matter, which is the *old contradiction* ſtill recurring. And this principle (to take off an objection here by the by) ſhews that *Lucretius*'s great argument is an unphiloſophical miſtake, when he ſays ſeparate ſpirits could not perceive without the help of the five ſenſes *(e)*. For to make the miniſtry of material organs neceſſary (univerſally in a ſtate

(d) To become percipient, or impercipient, at pleaſure, would be an effect equal to annihilating, or re-creating again, the conſcious Being arbitrarily. We might then elude puniſhment from human laws, and act what diſorders we liſted; nay ſport with Omnipotence itſelf, in a conſcious, or unconſcious exiſtence. This is inconſiſtent with our being dependent creatures, and moral agents; and lets us ſee the wiſdom, and neceſſity, of ordering things otherwiſe.

(e) Præterea, ſi immortalis natura animaï 'ſt,
Et ſentire poteſt, ſecreta à corpore noſtro;
Quinque (ut opinor) eam faciendum 'ſt ſenſibus auctam:

Nec

ſtate of ſeparation) to the perceiving external objects, is to make the perceiving them depend upon matter itſelf: or to make one dead ſubſtance become percipient by the help of another dead ſubſtance. Not to mention that when he wrote his philoſophical ſolution of the phænomenon of dreaming, which takes up one whole book of ſix, he might have remembered that we are then percipient, when the ſenſes are diſabled and ſhut up. And elſewhere he hath very expreſsly obſerved, that when we are without all ſenſe from the body, we are nevertheleſs ſtill percipient (*f*). Beſides, this ſuppoſition is manifeſtly falſe in fact; for the ſoul is percipient of its own internal actions, as in N° 4. and it acts thus internally, without being excited to ſuch action by the body, of which we have undeniable experience: if it were otherwiſe, it would ſtill want the power of action, or receive it from matter; which is an abſurdity that always returns upon us. In the laſt paragraph an abſolute neceſſity hath been ſhewn, why it ſhould act in a ſtate of ſeparation, ſometimes at leaſt, ſo that it is percipient alſo without the means of the body, contrary to the ſuppoſition on which the objection proceeds. By the power of reflexion it is both the percipient,

Nec ratione aliâ noſmet proponere nobis
Poſſumus infernas animas Acherunte vagare.
Pictores itaque, & ſcriptorum ſæcla priora
Sic animas introduxerunt ſenſibus auctas.
At neque ſeorſum oculi, neque nares, nec manus ipſa
Eſſe poteſt animâ; neque ſeorſum lingua, nec aures
Abſque animâ per ſe poſſunt ſentire; nec eſſe.

Lib. 3. ver. 624.

This argument in plain engliſh is, I think, if the ſoul can perceive *without body or matter*, it muſt have five *material organs:* a contradiction, which if he cannot fix upon his adverſaries, muſt return on his method of reaſoning. And when conſidered any way, it is only an indirect method of aſſerting, that matter, a dead inactive ſubſtance, lives and acts, by the help of organs of the ſame ſubſtance. What he enforces from the *Painters* and *Poets*, doth not bring his argument nearer a concluſion. He diſproves nothing, becauſe a *Painter* could not draw the portraiture of a ſeparate ſpirit; or becauſe the Poets deſcribe it analogous to our preſent ſtate; or becauſe the eyes, tongue, ears, could not perceive without the ſoul. Our modern ſceptics would do well to find out the ſtrength of this objection, or diſown it; as alſo to reconcile it with the following citation.

(*f*) *Præterea molli ſomno cùm dedita membra,*
Effuſúmque jacet ſine ſenſu corpus onuſtum:
Eſt aliud tamen in nobis, quod tempore in illo
Multimodis agitatur; & omneis accipit in ſe
Lætitiæ motus, & curas cordis inaneis.

Ibid. ver. 113.

and

and affords the object of perception to itſelf, as its former perceptions become the object of ſubſequent ones (*g*). The argument from the beginning of the ſecond paragraph is univerſal and abſolute, as being drawn from the nature of both ſubſtances ſeparately: and therefore, once again, it doth not ſtand in need of the action of external matter upon it to become percipient.

VIII. But ſecondly, the neceſſity of our being always active and percipient in a ſeparate ſtate, will yet better appear, if we conſider that though activity be a power, it is not a power to act or not to act at all: but rather a power to act this or that particular action, preferably to ſome other. If activity implied a power *not to act at all*, it would be contradictory to itſelf; for it requires no power not to act at all, or it is the negation of all power. Liberty is a power to do an action, or not to do it; but not a power to do that action, or elſe to do no action (*h*). There is a great difference betwixt not doing a particular action, which is one ſide of the alternative in liberty, and an utter abſtaining from all exerciſe of active power, which is one ſide of the preſent queſtion. Let us conſider the terms: A power to do no action, is no power to do any action. If we had ſuch a power, we ſhould be wholly and finally inactive, and ſtand in need of the firſt Cauſe to re-create again ſome power in us. Or, if activity implied ſuch a power, it ſhould be firſt a power to act, and then a power *not to have the power* to act: ſo that, take it which way we will, it is ſtill a ſelf-deſtructive notion. Therefore the ſoul in a ſeparate ſtate muſt neceſſarily and inceſſantly act ſome action or

(*g*) Mr. *Wollaſton* ſays (*Relig. of Nat. Delin. ſect.* 5. Prop. 15. pag. 91.) Nor is it at all ſurprizing, that we ſhould not be able to do this [draw an image of the ſoul in our minds, that is, in the ſoul itſelf]: for how can the mind be the object to itſelf? It may contemplate the body which it inhabits, may be *conſcious of its own acts, and reflect upon the ideas it finds:* but of its own ſubſtance it can have no adequate notion, unleſs it could be, as it were, object and ſpectator both. Only that perfect Being, whoſe knowledge is infinite, can thus intimately know himſelf.

(*h*) Mr. *Locke* ſays, (*B.* 2. *chap.* 21. ſect. 27) "A man ſtanding on a cliff, is at liberty to "leap twenty yards downwards into the ſea, not becauſe he has a power to do the contrary acti-"on, which is to leap twenty yards upwards, for that he cannot do; but he is therefore free, be-"cauſe he has a power to leap, or not to leap. But if a greater force than his, either holds him "faſt, or tumbles him down, he is no longer free in that caſe; becauſe the doing, or forbearance "of that particular action, is no longer in his power."

other;

other; and is only free as to the choice of its actions. This argument deſerves our attention, and will, I preſume, be found *decretory*.

IX. But to reaſon more mechanically with ſome; let us ſuppoſe that the ſoul might have the power not to act at all, at ſome times, and that activity implied this. In order to exerciſe this power, (if that were proper) or to ſuſpend the exerciſe of all power, it ought to will not to act at all, for ſuch a certain time. By what is ſaid, N° 5. it hath the power to act all this time; and though it might be eaſy to abſtain from any particular action, for the time required, by doing other actions, and ſo occupying its activity that way; yet, there being a pleaſure to an active nature, to be ſome way buſied, in thought or motion, it muſt be always on its guard againſt all action, that it do not unawares break out into the exerciſe of its activity, by doing ſome action or other. That is, *it muſt be vigilant and active, leſt it ſhould be active, i. e.* it muſt will the doing no action, and that for the whole time ſuppoſed; which is again ſelf-deſtructive, for *to will* is to act. If this were poſſible for the ſoul in a ſtate of ſeparation, why ſhould it not be more poſſible for it in the preſent diſadvantageous ſtate of union? for there is nothing here ſaid which our own experience doth not teſtify, when we are under no indiſpoſition, or rather no great indiſpoſition of body; and any perſon, on trial, may be familiarly convinced of it. What torture would it be to an infant, to keep it from ſtirring hand or foot? Nothing can ſtop the activity of the ſoul, but being clogged with an ill-diſpoſed organ. When we are ſick, or heavy with ſleep, or fatigue, it becomes eaſy to abſtain from action of the body, or mind; and only then. In the preſent incumbered ſtate, we find it is as eaſy to *will* (which is the only proper action of the mind) as *not to will*, not to mention the neceſſity we are under; and there is a pleaſure in reflexion, variety, and changing the acts of the will, as we ſhall ſee when we come to examine the nature of conſciouſneſs; ſo that though it were in our power not to change the acts of the will, it would require an inconceivable care and ſolicitude (*i*). It is one of the hardeſt things in the world to keep the attention

(*i*) A man may at his leiſure conſider theſe ſeveral queſtions, which relate to this ſubject. By the exerciſe of what power is it that the ſoul could effect that it ſhould not act at all? Is this the power of action, or of inaction? Is not inactive power a contradiction, or applicable only to dead matter? Doth it require but one act, or the continued exertion of this Power? Can a Being have power to effect that it ſhould have no Power? (This queſtion determined in the

tention close to one object, without wandring, or varying the acts of the will, for as long time only as one could repeat a few sentences. If the greatest criminal were to have his life, on condition of thinking but on one thing for an hour together, he could not perform it. Wherefore, without more words, whatever necessity appeared for the *power alone* in N° 5. is now to be ascribed to the *exercise of it*; all external impediments from body being removed. And since indefinent action infers indefinent perception, by N° 4. it likewise appears, that the soul must be indefinently percipient, living, or sensible in a separate state. Any one (as hath been hinted) will find it equally impossible, if not more in the present state, to banish perception, as to banish action from his mind. Therefore we need no longer consider these as powers that can be separated from acts, or which subsist in a bare potentiality *(k)*.

X. And

the last Section, when speaking of annihilation.) If this be possible in a state of separation, why not more possible in a state of Union? Would not the trial of this make a man solicitous to keep his mind in a state of inaction? Is not this solicitude itself a state both of action and perception? Is there any other way to perform this than by the indisposition of the body? Can it be said then that the mind performs it? How are we sure that the indisposition of the body does in fact perform this? Whoever surprized himself at any time, either asleep or awake, impercipient, or in a state of pure inaction; or was sure he was, for the least possible time, in such a state? Of this last question we shall speak hereafter.

(k) An objection hath been raised against the whole reasoning in these nine paragraphs, in the following manner. It is allowed that the soul hath activity or power in itself, but at the same time it is pretended that it cannot *exercise* this power, or *put forth* any act, unless it be united to the body; or that the body gives it occasion to act and exert its power; and since it cannot act without this occasion given it, that therefore it depends on being united to the matter of the body as a condition *sine quâ non*, though not as an *efficient cause*, in exerting any act.

This objection proceeds from not understanding, or at least not attending to the arguments I have adduced; however, I shall bring the whole reasoning into a narrower compass, and add some things to remove this particular prejudice. And first, I say, it is an express contradiction that an active Being should depend on a dead substance for the exerting its activity, so that it cannot *put forth* any act without it is first acted upon by that dead substance; *all action must certainly spring out of its own nature.* It may indeed depend upon the dead substance so far as that *limits*, *restrains*, or *hinders* its activity; and this is the way that dead matter really affects the soul in their present union; the power of the soul is limited and confined to a certain *manner* of action; and *degree* of that manner; and the matter of the body is necessary to its acting in this confined manner and degree: But this very consideration shews us that its native power would be more unconfined, if such impediment and limitation were taken off; and I assert that no man can conceive it possible that the soul should depend upon dead matter for *promoting*, *advancing*, or *forwarding* the active power it is endued with. This argu-

X. And laſtly, which is very material, and I beg it may be attended to; it plainly follows from this reaſoning all along, but more eſpecially from

ment in other words is, that a dead ſubſtance may be an *impeding cauſe* of the power of an active Being, but can never be a *promoting* cauſe of it.

This argument is drawn from the natures of both ſubſtances conſidered in themſelves, and apart; and therefore is the moſt proper to determine concerning them when ſeparated: And it is certainly quite wrong to conſider the diſadvantageous appearance the ſoul makes in a ſtate of union, and then to draw an argument concerning its power, when ſeparate, from ſuch diſadvantageous appearance. To argue from experience in this caſe is, in ſome meaſure, equal to a begging the queſtion; unleſs we had experience of both ſtates: ſince union with, and ſeparation from, a dead ſubſtance, muſt have quite oppoſite effects on a living Being. Let me aſk, Can the ſoul ſubſiſt at all, when ſeparated from the body? Or doth active Being require a dead ſubſtance to ſupport it? The objection here ſuppoſes, I think, that the ſoul is only a certain ſubtil aura, flatus, or ſome looſe, unſubſtantial thing that muſt be diſſipated, when not kept together by the matter it is confined to. And yet it hath been proved that the ſoul is a *ſubſtance*, a *living* ſubſtance, a *ſimple and uncompounded* ſubſtance (Sect. 2 and 3) which cannot ſtand in need of a dead ſubſtance in order to ſubſiſt; and in this very queſtion, we are arguing upon the ſuppoſition of its being actually ſeparated. It would be to *allow* and *refuſe* at once, to ſuppoſe it may ſubſiſt ſeparately; and yet to raiſe an objection from another ſuppoſition that it cannot ſubſiſt ſeparately.

If the ſoul then may ſubſiſt ſeparately, let me farther aſk what kind of a ſubſtance it is? A dead or a living, an active or a powerleſs ſubſtance? Or let this queſtion be anſwered, what is the ſubſtance in which life and power inheres as a ſubject, in this ſtate of union? I have ſhewn it is the ſoul or immaterial ſubſtance. After that let this be anſwered, whether ſeparation from a dead ſubſtance will deprive a living, active ſubſtance of life and power? This would be to make their union only the *ſubject* of the power; or it is to make two powerleſs ſubſtances *beget* power between them. If then the ſoul has power when ſeparated, as muſt be allowed; but cannot exert this power when ſeparated from dead matter, as is ſaid; it muſt have *power* without *ability*, which I look upon as a repugnancy in terms. And the objection proceeds upon ſuppoſing both ſides of this contradiction true; for it allows the ſoul to have power, and yet aſſerts it wants ability; ſince it could never exert this power without the concurrence of dead matter. The diſtinction therefore in the objection, between a condition *ſine quâ non*, and an efficient cauſe, is without ground; a *power* to act, and yet an *inability* to act without the concurrence of dead matter, is the want of power to act without the concurrence of dead matter.

Beſides, *life cannot conſiſt in a meer power of living*, as I have ſhewn; (ſee N° 5.) it is ſomething neceſſary. The ſoul therefore muſt have actual life when ſeparated from dead matter; or elſe it muſt be perfectly a dead ſubſtance. And if ſo, life belongs as much to dead matter in the ſtate of union, as to it; and two dead ſubſtances make up a living compound between them; or their *union* is the only ſubject to which the property *life* belongs.

Now ſince the ſoul muſt have *actual life* in a ſtate of ſeparation, it muſt be actually and conſtantly *percipient*, *ſenſible*, or *awake*; ſo that it doth not need to be acted upon by dead matter

from what hath been said in N° 7. that these several conclusions are not only applicable to the soul in a state of separation from all matter; but

matter to stir up, excite, or awaken its activity. Which, I presume, is the chief mistake the objection proceeds upon. When it is said that the matter of the body, by acting on the soul, gives it occasion to exert its activity; it is supposed that otherwise the soul would be in a state of insensibility, were it not roused, and excited to a sense of itself by something without; but this is to forget that the soul must be always awake and percipient in its own nature, unless we would incur the contradiction just now mentioned. Thus it can never stand in need of an occasion given it in this sense, as if it stood in need of being awakened into life and perception by dead matter.

If it be meant that the soul in a state of separation cannot act, for want of matter as a *subject* to act upon, or as an *instrument* to act withal; this is still the contradiction of allowing it the *power*, and at the same time depriving it of the *ability*. If any reason once forces us to assign a power to it universally, and without condition, (as I conceive my arguments do) that cuts off all such pretences, or conditions, as would deprive it of this power again. But *both these pretences* are false in fact. For, first, the soul is active about its own perceptions, or it works with them, and reflects upon them, even here: and since it must be percipient in a state of separation, it must have perceptions to work with, and be active about. When we reason upon power, life, activity, perception, the soul is busied neither about matter, nor any affection that can belong to matter.

And, secondly, when the soul reflects upon its own perceptions even in this state of union, I ask *by what power it doth this?* Or *by the help of what instrument* doth it perform such an action? The law of dead matter is, *to continue in the same state it is in.* And if the soul made use of that *dead substance* in the act of reflexion, this could not be but by exercising a power over it, or exerting an act upon it. Let this be considered. And that is, *we are forced* to suppose the soul exerting a previous act of power upon dead matter, at the same time that we contend, it can exert no act of power but by the help of dead matter. Or, *we cannot suppose the soul acting by the help of dead matter, but by supposing it acting without the help of dead matter.* This is a remarkable contradiction; it strikes at the root of our prejudices, and should for ever silence our objections.

This shews farther that the soul not only acts *without* the concurrence or instrumentality of dead matter, but directly *contrary* to it. The soul leaves off one action, begins another, changes the state of matter, and controuls it all manner of ways. And it is a direct contradiction that a dead substance should concur, in any sense, to make a living Being controul and counteract itself. Matter could not be supposed to be the instrument of this, without being supposed to be *first* over-ruled, controuled, and counter-acted. That is, when we would suppose matter to be the necessary instrument of action to the soul, we must necessarily suppose action in the soul of which it cannot be the instrument: *i. e. Our supposition confutes itself.* And in truth, every action of the soul upon matter is a proof, that it acts without the help of that substance, and contrary to its nature. And this lets us see that the actions of the soul spring out of the nature of the soul itself, as I asserted in the beginning of this Note. The inertia of matter once evinced, would be of great and universal use to us in this subject, if we would reason fairly from it. And if we will needs reason from appearances in a state of union to a state of separation, *this* that I have here insisted on, is a certain and undoubted matter of fact.

equally applicable to it, and equally true concerning it, in a ſtate of union with a body, or ſyſtem of matter, that were ſubject to no diſorder, or indiſpoſition, never liable to be exhauſted or run out, nor needed ſucceſſive reparations, as our bodies in this preſent conſtitution do. Therefore, in theſe ſeveral particulars, we may ſubſtitute the ſuppoſition *of a ſtate of union with ſuch bodies*, when it ſhall pleaſe our infinitely wiſe Creator, that our immaterial part ſhall again commence union with matter, inſtead of the ſuppoſition of a ſtate of ſeparation from all matter.

XI. This was all I deſigned to have ſaid concerning re-uniting our ſouls to ſyſtems of matter, by the power of an Almighty Being. But ſome have objected, *that the account I have before given of matter directly impugns the truth I ſeem here to aſſert; for if matter be what I have repreſented it, it muſt be an inhabile ſubject, utterly improper ever to be re-united with the ſoul, after it hath been once ſeparated from it, in any other ſtate of being, where the ſoul's happineſs is to be increaſed, and riſe to a much higher pitch than it enjoys at preſent; becauſe matter in ſuch circumſtances can be good for nothing but to impede the operations of the mind, obſtruct its action, and conſequently leſſen its pleaſure and ſatisfactions.* On account of this difficulty, I beg leave to be a little more explicite, according to the principles before laid down. If *theſe* have given occaſion to raiſe this objection, *they* will alſo help, I hope, to take it off. I did not think it could have been denied that our bodies might have a much more advantageous conſtitution than at preſent they have, nor that it could have been contended that matter, becauſe unactive, was a ſubject *inhabile*, and *utterly improper* to be united to ſpirit on better terms. For firſt, if we will argue about *the whole ſphere of poſſibility, the extent of Omnipotence*; it is plain that it can have no other limits than a contradiction in terms, or a ſelf-deſtructive conception; and this is really *to be without limits*. If we would impartially apply this mark of poſſibility in our reaſonings, we ſhould not ſtart ſo many difficulties about the poſſibility of the ſoul's being united to ſyſtems of matter, according to the purpoſes of infinite Wiſdom; or of theſe ſyſtems being vaſtly more advantageous, and the union with them more pleaſant, than with our preſent bodies. What we ſee already performed, *viz. the creation of the ſubſtance of our ſouls, and of our bodies, out of nothing, and the actual union of theſe at preſent*, which cannot be denied to be facts, is every whit as inconceivable to us, and in truth much more ſo, than the uniting them together again when ſeparated. And yet we

make a difficulty of ſuppoſing a certain effect may be produced, though we muſt allow, that a much greater has been already produced. This is enough as to the poſſibility of our ſoul's being re-united to ſyſtems of matter (or the ſame ſyſtems of matter) of an equally advantageous conſtitution with the preſent, when it ſhall ſeem good to infinite Wiſdom. As to the poſſibility of the conſtitution's being vaſtly bettered in a ſtate of re-union, let us firſt reflect in general, that if the human ſoul could have reaſoned on this point, before immaterial ſubſtance was united to a body of any conſtitution, how inconceivable this effect muſt have appeared to it. And when it had ſeen the effect performed in ſome *imperfect creatures, animals that only live in one ſenſe, or two perhaps*, this low inſtance muſt have appeared to it the only poſſible conſtitution of a ſyſtem of matter to which immaterial ſubſtance could have been united. And when it had ſeen this *difficult problem* ſolved to more advantage, and, if I may ſo ſay, by a *ſuperior method*, in ſome of the perfecter ſorts of creatures, it muſt ſtill have been the effect actually produced, which could have given it a notion of the poſſibility of producing it. But this would have concluded nothing, according to the laws of good reaſoning, concerning the limits of infinite Power, but only have proved the narrowneſs of its own conceptions: nor would it have been any argument againſt the endleſs variety of artifice it was afterwards to behold, in the curious mechaniſm of *inſects, fiſhes, fowls, beaſts*, and laſtly of *man*, that it could not conceive any thing of this beforehand. And ſuch a diverſity of performing this controverted caſe (the ſame in the main with that in debate here) ſhews us that nothing is more abſurd than to limit poſſibility by our manner of conceiving. We ſeem to have contracted ſome ſuch notion concerning Omnipotence in bringing to paſs effects now, as *Lucian* and the Poets give us concerning the ſuperannuated power of *Saturn*; that in former times, and about the creation, it was perhaps good for ſomething, but hath now loſt its efficacy and virtue. However, as yet, I cannot help thinking that I have ſhewn, from the ſame account of the inactivity of matter, ſuch a ſcene of things conſtantly performed by the ſame firſt creating Power, as in no reſpect yields to the raiſing up our ſhattered bodies from duſt and corruption (*l*).

XII. But

(*l*) When we ſeriouſly reflect on what is only accidentally mentioned here, we may obſerve with concern, that men generally admit of a kind of *fabulous age* into their philoſophy. All beyond a certain date is held conjectural. We ſee a regular viciſſitude of things obtain; and

XII. But to come nearer the difficulty: let us, on the one hand, conſider the particular *diſadvantages* we are under in the preſent conſtitution of our bodies, *from the inactivity of matter*, or otherwiſe; and call to mind, on the other hand, the ſeveral *concluſions* made above, *ſect.* 2. The firſt diſadvantage is that of moving our bodies from place to place. This, the foundation of which lies in the *inertia*, or reſiſtance of matter, a property that it cannot be diveſted of, as it is a ſolid extended ſubſtance, is increaſed, partly by the quantity of matter in our bodies, and partly by their gravitation to the earth, their place of preſent habitation. Now we ſaw in that ſecond ſection, that even in the preſent conſtitution of our bodies, all that we perform in ſpontaneous motion, is little more than exerting an act of the *will*; next to nothing abſtracting from that act of

and this is all we allow as certain: How it was at firſt inſtituted, if ever it was inſtituted, or if it requires any power to maintain it, or if any power was manifeſted in the firſt production of things; theſe are *points* that men think can only be decided by gueſſing. *Ariſtotle* and *Epicurus* have made the two leading gueſſes; the one, that this conſtitution was *eternal*; the other, that it was hit upon *by chance*. Theſe we follow. And the natural powers of matter (activities of an inert ſubſtance) patch up the ſcheme. Surely reaſon, which diſcovers to us the nature of *an effect* from that of *a cauſe*, may let in light upon this conjectural period of philoſophy. Reaſon was as much reaſon from eternity, as at this day. A contradiction that cannot obtain now, could not have obtained millions of ages ago. This is an everlaſting ſtandard. We may be as certain that there cannot be a ſelf-exiſtent effect; that dead matter could not have determined its own location, figure, motion, quantity; that power cannot be exerted but by a powerful Being, *&c.* We may be as certain, I ſay, of theſe points, as if we had exiſted from the beginning, and been *eye-witneſſes* of all that ever happened. Nor is the power of that Being, who firſt reared the Univerſe, and performed the firſt wonders, now grown old and decayed. I have endeavoured to ſhew, that the foundations of nature would ſuddenly be looſened, and all things run inſtantly into horrible confuſion, if a power equal to a conſtant creation, were not indefinently exerted in ſupporting the order and frame of the world; (ſee the Note *(x)* N° 11. *& alibi paſſim*, Sect. 2.) Would we be convinced then that Omnipotence once was? Let us conſider that it now is; now works; and is ever putting forth ineffable virtue and force through the whole fabrick. And ſhould not this put an end to the fabulous age of philoſophy? We need only run the conſequence backward, and ſay, the preſent contradictions were always impoſſible. Nor, on the other ſide, can any thing hinder us from running the conſequence forward into all futurity. Infinite power and perfection cannot be one day, antiquated; nor ever ceaſe to govern all things with excellent wiſdom and goodneſs. The foundation of this is, that which is reaſon now, hath been ſo from eternity, and will be ſo for ever. And, (to add one queſtion more) into what ſhall we reſolve this eternal indefeaſible nature of reaſon and truth; but into the ideas of the ſupreme infinite Mind which muſt be infinitely or eternally true and reaſonable?

volition,

volition, and as to the overcoming the inactivity of matter; ſince an indefinitely ſmall part of the matter that is moved, is moved by the ſpontaneous mover, and all the reſt is moved by the immediate power and impreſſion of the *firſt Mover*. Nay we ſee that the whole *ſyſtem of material nature* round us, and within us, is ſo curiouſly wrought and contrived, and ſo artfully put together, that upon the little which the human ſoul doth, a long ſeries of motion often ſucceeds, as if we performed it all, by this ſingle act of willing it only: and that *infinite Power* is not wearied, nor exhauſted, nor perplexed, by being thus ſubſervient to our *will*, or really to the ſpontaneity of *all living creatures*, in all places, and at all times. Nor can we think, but by forgetting what it is, that *ſuch Power* could be wearied, or embarraſſed, though the creatures, whoſe ſpontaneous motions are thus performed by it, were more numerous, (ſuppoſing all the other planets repleniſhed with them, like this our earth, as is moſt probable; and all the fixed ſtars in the heavens to be ſuns with ſyſtems of ſuch planets round them) and the motions of theſe creatures more nimble and frequent, and their acts of volition more quick. *Infinity of Power* prevents all ſuch difficulties. There is a neceſſity that *God* ſhould be in all thoſe far diſtant places, *intimately*, by his power and knowledge, as *here among us*: and we ſee it is ſo. Who drives round the planets themſelves, thoſe vaſt unwieldy bulks of matter, in their immenſe orbits, with prodigious rapidity, and at the ſame time whirls them round on their own axes? From this conſideration then, we may conceive it *at leaſt poſſible* that the reſiſtance of matter, that worſt and moſt ſtubborn of all its properties, ſhould coſt us no trouble at all; and that the ſpontaneous motion of our bodies, or the motion of other bodies we were concerned with, ſhould be performed, barely upon our willing it, in what direction, and with what celerity we willed it, according to our exigencies and deſires; and that our moving, ſtopping, changing direction, ſhould be as eaſy to us, as now it is ſimply to exert theſe ſeveral acts of volition, which we find it as eaſy to exert, as not to exert; being naturally performed in conſequence of theſe volitions, by the ſubſerviency of an *infinite motive Power*. Our ſeeing that it is ſo already, in a great degree, with reſpect to our preſent ſpontaneous motions, is a ſure enough ſign of the poſſibility of ſuch a method; and that it is even conſonant to the ways of infinite Wiſdom. The impreſſion of gravitation, which anſwers great and neceſſary purpoſes, in our preſent condition, as hath been ſhewn, cementing us to this our earth, on which our buſineſs at preſent is, and wiſely in-

creaſing the inactivity of our bodies, might be ſuſpended; or receive a contrary direction; or become more intenſe in that contrary direction; which happening, would be but the *ſame inſtance* of infinite Power, as at preſent. A greater degree of motive power might be communicated to the human ſoul in an after-ſtate, and that in any aſſignable proportion. And laſtly, the quantity of matter in our bodies may, and in all probability will, be much leſs then; of which immediately. Thus it is not only not impoſſible for infinite Power, but not inconceivable to us, that the inactivity of matter, that quality of it that gives us moſt uneaſineſs in our preſent union, and is moſt unpromiſing in any union, ſhould be as eaſy to us, as if we were not united to an unactive ſubſtance at all.

XIII. The next diſadvantage we labour under, from the preſent conſtitution of our bodies is, that their ſyſtems of matter are in a conſtant change. Spontaneous and animal motions occaſion a continual waſte of certain parts of matter, and myriads of particles are continually flying off from all parts of our bodies, or ſucceſſively *excerned* from them: this loſs we are obliged carefully to make up with new additions of proper matter, which forces the body into *fits* of indiſpoſition, *intervals* of reſt and ſleep, that this newly thrown in matter may be wrought up in a proper form, and diſpoſed to ſucceed in the room of that which is thus caſt out. Alſo conſtant ſupplies of freſh air are neceſſary for the uſes of reſpiration, and to maintain the lamp of life. But let me ask (which is the material queſtion here) *by whoſe power and contrivance is it*, that matter hath at all this quality to make up the loſſes in our bodies, by a conſtant ſucceſſion and change? Or by whoſe inſtitution is it, that the air is *thus uſeful?* That there is ſuch a *treaſure* and *magazine* of it prepared? Or that it ſhould be purified, and made uſeful a-new, when diſabled, defiled? If the *Sceptic* can make it appear, that matter hath in itſelf certain eternal and neceſſary qualities, independent of any other being; which therefore the Being who inſtituted the preſent animal œconomy, was obliged to make uſe of, as he found them, and as beſt he could, applying one thing to one purpoſe, and another to another, as their eternal and neceſſary natures would allow, not having an abſolute power over the materials he wrought with; then I ſhall be *ſilent*. But if the contrary of this account may be ſuppoſed without a contradiction; if the contrary of it hath been proved; and eternal matter with neceſſary powers ſhewn itſelf to be *the greateſt contradiction*; where will the remaining difficulty lie?

This

This whole affair, how dark and abſtruſe ſoever, may, I conceive, with ſubmiſſion, be yet reduced to this plain and familiar ſtate: Whether the ſame quality, (energy, power, or virtue, if we pleaſe now metaphorically to aſcribe theſe to matter) may be continued, or preſerved, in any individual particle, or quantity of matter, by that *ſame Power* which firſt endued it with that quality; this Power being *infinitely great?* If this can be allowed, and I think it will amount to a contradiction not to allow it; then even we may conceive it feaſible, or poſſible, (and that is all that is contended for) that the conſtitution of our bodies may be ſuch in an after-ſtate, that there ſhall be no change of matter in them; or that the ſame individual matter ſhall always ſerve to the ſame purpoſes: ſince, after the nature of matter is diſcovered to be what it is, as in that ſecond ſection, it is not conceivable to us, that ſuch an unactive ſubſtance ſhould, by the conſtant ſucceſſion of it, *recruit* our bodies, unleſs it were by the immediate indefinent power of the firſt Being, impreſſed upon it. It muſt undoubtedly appear to us men, eaſier to preſerve a thing in the ſame ſtate, and with the ſame qualities, be they what they will, than by an uninterrupted application of power, to effect an indefinent change of ſtate and properties in it. What is it but an *arbitrary* and *unſupported* aſſertion, when the Sceptic affirms that the preſent conſtitution of body is the only one that could be; the only one which an infinitely wiſe *Cauſe* could contrive, or an *infinitely powerful one* execute? He hath no knowledge of this part of nature, beyond a few obſervations of matters of fact, *gleaned up* from the conſtitution that now obtains. Nor can he retort this argument, by ſaying, we cannot ſhew that infinite Power can do this. Let him conſider that it is an eaſy thing to argue on the ſide of infinite Power; and how unwiſely he takes the other ſide of the queſtion; and defends the living powers of dead matter. As hath been obſerved before, the preſent conſtitution of our bodies ſeems both more *operoſe* and *coſtly*, in reſpect of pains and of materials, as deſigned to ſhew us the perfections of the *Author* of it. Now if the preſent œconomy were antiquated and laid aſide, and another law obtained; if either reparations were not neceſſary to be made, or if neceſſary, yet as neceſſarily and inceſſantly made, as the waſtes were that occaſioned them, and as much without any act or conſciouſneſs of ours, as now the circulation, reſpiration, and all the reſt of the animal œconomy, is performed without our knowledge, or participation, (which ſurely is a thing conceivable enough, from the *inceſſant operation* of God ſhewn above, through all the parts of matter) if we were ſurrounded with,

and conſtantly breathed, ſuch an enlivening element, as would be literally, and to all purpoſes, an *aura vitalis*; all the train of bodily evils, ariſing from the preſent conſtitution of our ſyſtems of matter, wearineſs, weakneſs, want, old age, diſeaſe, pain, would diſappear for ever. Our ſouls, which are, in the preſent conſtitution of the body, under a neceſſity of being ſtill active and percipient, when the diſorder of it doth not diſtreſs and over-power their active nature, would be then always under that *pleaſant neceſſity:* our time, and thoughts, and application, which are now engroſſed by the back and belly, and a thouſand racking cares and diſquietudes in providing for theſe, would be then wholly ours, to beſtow upon rational acquiſitions, and the purſuit of unfading pleaſures. In ſhort, as certain as it is that we cannot be other than miſerable, under the preſent conſtitution of our body, (as ſhall be made appear) ſo certain is it, that this change will free us from all that load of pain and affliction, not only in our body, but in our minds, and bring us up to that ſtate of *indolence*, which ſhall be explained below. And this is all indeed, I conceive, that can be expected on the part of matter: the reſt of our happineſs, true and *unallayed* pleaſure, muſt conſiſt in the gratifications of the rational nature, and be ſolely felt in our immaterial part. But is not this enough; is it not a *wonderful inſtance* of power, that we ſhall be as eaſy and free in our fellowſhip with unactive ſubſtance, as ſpirits quite diſengaged from it!

XIV. Again, we may ſay, I think, without incurring any inconvenient conſequences, that when the bodies of rational beings are deſigned for *other climates* of the Univerſe, than ſuch a groſs part as we reſide in at preſent, a ſmall quantity of that bulk of matter that now compoſes them, will ſerve for corporeal ſyſtems in thoſe *finer regions*. For it is the identity of conſciouſneſs, not of material parts, that conſtitutes the ſame conſcious or rational Being. Since then it appears by what hath been ſaid in that ſecond ſection, that the *attraction of coheſion*, whereby the parts (of all the parts) of our bodies ſtick together, is the immediate effect of the *firſt Cauſe*; if it ſhall ſo ſeem good to his infinite and unerring Wiſdom, that this attraction ſhould be more intenſe in thoſe finer ſyſtems, theſe parts would thus become fixt and permanent, and all change, waſte, and conſequently reparation, be prevented. And by this way of conceiving it alſo, we come again to a poſſibility of the ſame effect: in which way of conceiving, no inconſiſtency can be alledged, unleſs by aſſerting the point

point in diſpute, that any diſpoſition whatever, differing from the preſent animal œconomy, *is impoſſible.* And the advantages of this change would be the ſame that were juſt now enumerated. The reſiſting part of our compoſition would thus *be leſſened:* ſuch bodies would not at all be cumberſome, but obſequious and eaſy; ſtill numerically *the ſame*, and *ours* with propriety; and as little liable to the inconvenience ariſing from being made up of parts, as pure ſpiritual ſubſtance itſelf. Whence, in a particular manner, appears their folly, who to prove the ſoul mortal, think it enough if it were ſhewn *material:* for if other difficulties would allow the ſoul to be at all material, this would be no hindrance; as hath often before been ſaid. Whence alſo it appears that an objection ſtarted by modern Free-thinkers on this ſubject, is either a wilful miſtake, or made through much inadvertency: namely, That if all the men that ever lived on the earth, were to have bodies given them at one time, there would be a deficiency of matter to furniſh out ſo many corporeal ſyſtems; and that if theſe bodies were to be tranſported to a purer, finer æther, they would not be able to ſubſiſt for any time *(m).* This is *poor* indeed for *philoſophers!* The meaneſt among the people have more refined notions, than to imagine that we ſhould eat, drink, and do the ſame things in an *after-ſtate*, as now; or that the maſs of blood ſhould be as liable to fevers there, as here after a debauch! Theſe men tie down infinite power to their own way of *miſconceiving* things; and then aſſert the impoſſibility of their own imaginations. It hath been demonſtrated by an unexceptionable hand, that a very moderate quantity of matter might fill the whole ſphere of *Saturn*, and not leave a vacuity above that of an aſſigned diameter *(n).*

XV. The laſt diſadvantage the ſoul labours under, from the preſent conſtitution of the body, is that it perceives external things but *a few ways*, and by a few inlets, or paſſages of the body: but what hath been already ſaid may be eaſily applied here. It is no better argument againſt the poſſibility of more ways of perceiving external objects than *five*, becauſe there are but five, than it would have been againſt the poſſibility of more than *one* or *two*, if there had been but one or two; or becauſe ſome creatures may have but one or two. If an animal body had been contrived which ſhould have been all over one common ſenſory to the

(m) See a late Book, *The adventures of* Jacques Maſſie.
(n) Introduct. ad ver. Phyſic. Lect. 5.

mind lodged within; none would have excepted againſt the poſſibility of ſuch a body: and it is no argument againſt *the poſſibility of it*, that ſuch a body hath not actually been made, unleſs an inconſiſtency in the thing itſelf could be ſhewn (*o*). Some inſects have whole cluſters of eyes, when their exigencies require *more than two*; and ſome creatures can thruſt out their eyes to a diſtance from their head: and there is variety enough exhibited in diſpoſing the *other* ſenſes, in the ſeveral ſpecies of animals, to let

(*o*) It may perhaps be the more eaſily conceived, that the body may be all over one common ſenſory to the ſoul, if we conſider that the body, in its preſent conſtitution, *limits* and *confines* the perceptions of the ſoul, but no way effects them. The fabrick of the eye is indeed wonderful, and by it this mechanical (or rather optical) problem is performed, that a living percipient *Being*, confined to a *dark* and *cloſe* place, is apprized of what exiſts, and is done without, and at a diſtance. But this muſt be performed by communicating motion from thoſe *diſtant objects* to that *percipient Being*. A material organ, however artificially contrived, could conduce no other way to the perception of a *living Being*, than by communicating the motion it receives. It muſt be the percipient *Being* itſelf, that perceives theſe communicated motions, by virtue of its own *perceptive faculty*; and ſince it is *percipient* in itſelf, and *confined* to a dark and cloſe place, we muſt of conſequence conceive its *perceptions* to be *likewiſe confined*; and that the eye only permits them on one ſide, by communicating motion only from one place; and therefore that on all other parts they are hindered, or the motions are intercepted. How much is it then that the eye performs here? Thus much only, I ſuppoſe; it limits and confines the perceptions of the ſoul to a narrow ſpace, as a *hole* in the window-ſhutter, limits and confines the entrance of the *rays* of light. We ſaw before, *that all action muſt ſpring out of the nature of the active Being itſelf*, (ſee the Note (*k*) N° 9.) and it is no leſs certain here, *that all perception muſt ſpring out of its own nature, or belong to it*. It is true, it may be ſaid, that the *eye* modifies the motion which it communicates; and thus conduces to the perception of the ſoul. But if there were no percipient Being *within*, the motion, however modified, would not be *perceived*: and to make the perception of the ſoul *depend* on the *modification* of mechanical motion, or *owing* to that, is ſtill to incur the contradiction of *two powerleſs ſubſtances*, &c. And, ſecondly, though the rays of light are made to *converge*, and form an *image* in the bottom of the eye, the eye itſelf is as little active in doing this, as the hand or foot is. It is *another Being* that performs the motion, and the *ſoul itſelf* perceives the *image* or the motion excited by it. And if the *ſoul* perceives the images, or *pictures* of objects, it may as eaſily perceive the *originals*, or objects themſelves. There would be no neceſſity of a *lens* in the hole of the ſhutter, when the room is darkened, to form the *images* on the oppoſite wall, if the rays from the objects could enter in their natural order: and it requires no more *art*, nor a greater *perceptive capacity* in the ſoul to perceive the external objects, at firſt hand, than to perceive theſe *images* on the wall. Juſt ſo; the reaſon why this artifice in the eye (which is the great, original *camera oſcura*) and theſe images on the *retina* are neceſſary, is becauſe the ſoul is *confined*, and in a *dark room*; and the ſame vitive faculty which perceives the *copies* or pictures there, muſt as eaſily perceive the originals. It is ſtill but perception of *figure*, in the one caſe as in the other. The confinement of the ſoul therefore to a dark

let us see that the *great Contriver* was not straitned; and that there were more ways of *solving the problem* (as I said above) than one. In our present condition, we have ways of applying to all the qualities of objects, that our necessities require; and without all doubt, we shall have ways of applying to all the qualities of objects, that our future happiness and pleasure demand. We have *reason*, that superior faculty of the soul, which no avenue of the body could *let in* upon it; whereby we discover truth, and grow acquainted with the *abstract natures* of things themselves, which consist

dark room, makes all this art and address necessary; and yet we infer from thence, that the soul could not perceive external material objects at all, unless it were thus confined, and still carried a kind of *camera obscura* about with it, and surrounding it! And if this is the art to make confinement and darkness consistent with perception of external objects; nothing can be more preposterous and unreasonable, than to imagine from thence, that darkness and confinement *are necessary to the perception of these*; or rather, that this *darkness*, this *confinement*, and this *art*, are the things which *effect* perception in the soul. And I am sure they imagine thus who tell us so often, *Quinque ut opinor eam faciundum est sensibus auctam.* The perception of a living *Being* cannot be owing to limitation and confinement, nor depend on the helps that are necessary, when it is thus shut up and limited. No man can maintain this, without being soon reduced to grievous contradictions; agreeably to what has been said before.

Hence therefore, as was asserted, the eye only limits the perception of the soul, or permits it on one side, by communicating motion only from one hand. And the reasoning is the same with respect to *the other organs of sense*; they only convey the motions of which the soul is percipient; but for wise reasons these motions are impeded, except only through these *avenues*. And thus they bound in the natural perceptivity of the soul, otherwise extensive and unconfined. Hence the *material organs* are (as the word imports) the instruments only for limiting a *certain manner* of perception, or confining that manner to a *particular degree*, that it be not more extensive than suits our present condition; but are not *the causes* of that perception in the soul. The right disposition of the medium, and the due distance of the object, are also necessary to perception, which nevertheless are not causes of that perception. So the bad disposition of the *humours* and *coats* of the eye may hinder perception; though their right disposition be not the cause of it; in the first case *the limitation is total*, and in the last some part is removed. Now since each organ is the instrument only for limiting a certain *manner* of perception, or confining that manner to a particular *degree*; we are to say, That the soul hath the capacity of perceiving in that manner, *not because* such an organ is the instrument; but that such an organ is made the instrument to limit that manner of perception to a particular degree, because the soul hath the capacity previously in its own nature without limitation. And indeed it is not to be supposed, if there were an eye placed on the back-part of the head, which might communicate motion from objects behind, that the soul would not see these objects likewise, as it perceives those before us. This would be (if I may so express it) to fancy the soul blind on that side. Whatever reason there is that it should be percipient of motion coming from one part; the same there will be for its being percipient of motion coming from any other part, and really from all parts round. And I have immediately shewn, that the particular modifications of the motion, are but the *art* necessary to it as being confined;

ſiſt ſolely in idea, and are not properly objects that can enter by material organs. This faculty may admit of greater improvements and heightnings (as ſhall be obſerved in another place) than we can conceive our corporeal ſyſtems to be capable of.

XVI. But it has been ſaid, which is the chief part of the objection, that it muſt be a puniſhment to ſpirits, once ſeparated, to enter again into ſyſtems of ſuch matter, howſoever diſpoſed; and that this is inconſiſtent with

confined; for we ſhould ſtill incur the contradiction, which I have endeavoured to explode in the beginning of this ſection, that two dead ſubſtances might riſe to life by being united; if we allowed that the motion of dead matter, howſoever modified, might endue the ſoul with a perceptive capacity of any objects, whether placed before, or behind us.

Therefore I conclude univerſally, with reſpect to external objects, and the functions of the ſenſes, that the perceptivity of the ſoul is confined by the organs of ſenſe, and no way *affected* by them; or (if this way of expreſſing it be thought not ſo accurate) that the organs of ſenſe take off ſome of that limitation from the perceptivity of the ſoul, which would be otherwiſe univerſal; and that the modification of the motion is neceſſary, not upon the account of the *perception*, but upon the account of the *confinement* As more art is required, where the difficulty in the performance is greater. And, leſt any ſhould think this a partial account of this affair; let us ſuppoſe a man ſuddenly deprived of *hearing*, *ſeeing*, *feeling*, &c. or the organs to be diſabled; and let us conſider the ſtate of the ſoul in theſe circumſtances. Laſtly, let us ſuppoſe that all the *avenues* of the ſenſes were *opened* again: In the firſt caſe there is a *total limitation*; and in the ſecond, a part of that limitation is removed: but the ſoul itſelf is neither deprived of its perceptive capacity in the one, nor endued with it anew in the other; that remains inherent in the ſoul itſelf.

Now to apply this to the main ſubject of the ſection, or to the ſoul in a ſtate of ſeparation. This cannot be reflected on but with much pleaſure, I think; and we may now ſpeak with more aſſurance of the *enlarged life* which the ſoul ſhall have when ſeparated from the body. For, ſince it is contradictory that its perception ſhould be effected by the modification of motion, as communicated by material organs; it is even inconceivable that a prodigious limitation ſhould not be taken off from it, when freed from the confinement of theſe organs. So unphiloſophical is *Lucretius*'s objection, that the ſoul could not perceive *material objects*, but by the help of *material organs*; *i. e.* could not perceive matter, but by the help of matter! And now if we conſider perception by organs in this view, the wonder will be, not that the ſoul is endued with perception, by the mechaniſm of the eyes, ears, &c. which hath hitherto been the general prejudice in conſidering this inſtance of the *Creator*'s power, and is indeed contradictory; but that the otherwiſe not bounded perceptivity of the ſoul, ſhould at all be made conſiſtent with, or actual perception in any degree be preſerved, in the union and application of dead matter to the ſoul. We carry over our wonder to the impoſſible ſide, and think nothing worth admiring unleſs an impoſſibility is wrought. Though this is only one particular inſtance of our general prejudice in conſidering the ſeveral parts of nature, where all efficiency is aſcribed by us to natural activities and powers of a ſluggiſh ſubſtance.

Farther,

with the deſign of making good men happier, in that ſtate of re-union. But I anſwer, that this can be no puniſhment, nor diminution of the happineſs deſigned them, if we conceive it within the reach of *infinite Power*, to bring this union to a ſtate of *indolence* or inoffenſiveneſs, on the part of matter (as I have endeavoured to ſhew, in theſe laſt paragraphs, it is) for to have no trouble, or uneaſineſs at all from matter, is preciſely the ſtate of happineſs, with reſpect to it, that ſpirits have, which are entirely free from it. And if we go over to the *other ſide*, and ſay there

Farther, ſince the perceptions of the ſoul are limited and confined by the organs of ſenſe, but no way effected by them; what is ſaid here thus at length falls in with what was ſaid in the Note *(k)* N° 9. or the preſent argument becomes the ſecond part of the *argument* inſiſted on there. We ſaw there, that it was contradictory to ſay *the matter of the body is the inſtrument of action to the ſoul, or that the ſoul could not be active without it*; becauſe we were forced to ſuppoſe the ſoul exerting a previous act of power upon dead matter, at the ſame time that we contended, that it could exert nô act of power but by the help of dead matter; or we could not conceive the ſoul acting by the inſtrumentality of matter, but by conceiving it acting without the inſtrumentality of matter. And here the matter of the body is as little the inſtrument of *perception*, as there it was of *action*; for we cannot conceive the ſoul percipient by the inſtrumentality, or help of that matter, but by conceiving it percipient previouſly in its own nature, and without the help of ſuch matter. When it perceives itſelf *affected*, it doth not borrow *this perception* from the thing affecting it, by the very terms and conception: *perception* ſprings as much out of the nature of the ſoul, as *action*. And, as has been ſaid above, we cannot conceive perceptivity, or life, to conſiſt in the mere capacity or power of living; in this we are neceſſary; otherwiſe the living Being muſt be dead to all purpoſes. Read again the end of N° 6.

And finally, ſince the body limits and confines the perceptivity of the ſoul, we may conceive that it might limit that perceptivity *leſs* and *leſs*, till at length it became all over one common ſenſory to the ſoul; or admitted the motions from external objects all manner of ways. *For admitting, or communicating motion from external objects, is all that ought to be underſtood by a ſenſory.* And ſince we ſee ſome inſects have whole cluſters of eyes, as I mention above; and that one of the ſenſes is at preſent diffuſed all over the body, namely *feeling*; theſe inſtances ſhew this to be neither impoſſible nor inconceivable.

I cannot put an end to this Note without adding what a learned and ingenious Friend has farther obſerved on this ſubject, *viz.* That it may be one reaſon among others, why the body thus limits and confines the perceptivity of the ſoul in the preſent ſtate, that there might not be a confuſion of objects all acting on the ſoul at once, and a hurry and indiſtinctneſs in the attention; as when a perſon has more things to diſpatch than he can well look to: And that this may likewiſe be one reaſon why all our paſt thoughts and conſciouſneſs, are not in view at the ſame time; though they may be recollected in a great meaſure when occaſion requires: But that however, in a ſtate of ſeparation, when the *activity* of the ſoul is freed from all impediments, its *perceptivity* will alſo be without confinement from material organs; and both will be in proportion then, as they are now.

is a *poſitive* and real happineſs in being joined to matter, it would follow that the happieſt ſpirits ought to be in a ſtate of union with it. But ſure no attentive man ever thought that there conſiſted any real felicity in being united to material ſubſtance. A paradiſe of the pleaſures of ſenſe is very groſs philoſophy. It is enough that it ſhall give us no impediment, let, or reſtraint; the inactivity of it being *corrected* by an *infinite motive power*; and the fixedneſs of it rendering it as little inconvenient, from being made up of parts, as if it were pure ſpiritual ſubſtance; and that it ſhall leave all other happineſs, rational and true pleaſures, as acceſſible to us, and as endleſly increaſible, as if we were not at all concerned with it. Thus, *infinite power intervening*, our being united to, or ſeparated from matter, appears a thing indifferent, either as to the degree, or kind of our happineſs. It is true, we are ſubjected to a great *ſuperplus* of pain and trouble, from the preſent conſtitution of our bodies, on the moſt advantageous ſuppoſition we can make; *wiſely*, to ſhew us that happineſs is not to be expected here, nor at all from the gratifications of ſenſe; and again, we are made capable of rational pleaſure, which cannot be finiſhed, or even well begun in this period; for the ſame reaſon. For *rational pleaſure* is ſuch that we might ſay, the Author of our Beings was not infinitely rational, if ever it were to have an end. Upon this and other accounts, I ſhall afterward enquire as exactly as I am capable, into the nature and extent of theſe two different kinds of pleaſure, ſenſual and rational. But to return from this digreſſion, to where we left off at N° 9. concerning the indefinent activity of the ſoul in a ſtate of ſeparation.

XVII. It will poſſibly be ſaid, that though it may be eaſily conceived that the human ſoul ſhould be *inceſſantly percipient* of ſomething or other, yet it ſeems hard to imagine that it ſhould be *inceſſantly active*; that if it is only active by *willing*, and only *wills*, when it turns its perceptivity from the conſideration of one object to another, it muſt at that rate be inceſſantly ſhifting the objects of its contemplation; and for it to dwell on the conſideration of any one, for any time, would be impoſſible: that we have experience, even when the body is beſt diſpoſed, of its being merely paſſive, and percipient only of objects offered to it, without its own activity exerted in turning to them; and that this inceſſant action would be more a *fatigue*, or rather *torture* to it, than any thing elſe, giving it, as it were, a *vertigo*, in continually whirling from object to object. But in anſwer

anſwer to this, it is to be obſerved, that the ſoul is not only active, when firſt it applies itſelf to the conſideration of any object; but inceſſantly active, all the time it is conſidering that object. The applying the perceptivity to it, is the change of action, the end of one, and the beginning of another; but the continued application to it, is that action continued, or the firſt act of willing ſtill kept up. For, ſince to will is to act; to continue the will, is to continue the action; and to will without intermiſſion, is to act without intermiſſion. Give me leave to illuſtrate this, by a familiar compariſon. When a man takes firſt hold of any thing, a piece of *iron*, *v. g.* with a pair of tongs or pincers, he acts, or begins an action; but the action is continued, all the time he holds the iron, be it as long as it will, till he quits this hold for another, or this piece of iron for another. And though he ſhould do nothing but hold it; yet he doth ſomething when he holds it, *by the terms:* he continues the action. Which ever way it be that the ſoul affects the body, when firſt he takes the hold, it continues ſtill to affect it the ſame way, all the time till he lets it go. The animal ſpirits, which are, probably, the immediate miniſters of the will, crowd inceſſantly into the ſame parts, and there is inceſſantly the ſame tumefaction, or contraction of the muſcles, which are the inſtruments of this action, as at firſt. The matter is not much different in thinking: to keep an object under conſideration, is the ſame thing as a conſtant attention, or application of the perceptive faculty to it; and this is effected by *conſtant willing*. Juſt as looking ſtedfaſtly upon one point, requires a conſtant direction of the *axes of viſion* to that point; which muſt be effected by conſtantly exerting that power, which the ſoul hath over the motion of theſe axes. When we are ſick, or have a head-ach, it is with pain we can perform this for any time, which ſhews it to be action. The property of matter, whereby it continues in that ſtate into which it is once put, proceeding from its want of power to work a change, is by no means applicable here: and it is our prejudice, to call the *tranſition* only of the perceptive capacity, from one object to another, action. We are indeed ſo accuſtomed to feel difficulty in action, when we act by the body, that if an action coſts us no trouble in performing it, or produces no ſenſible change in matter, we loſe the notion of our being active, and *the diſtinction* we have formed to ourſelves between *action* and *inaction*. When we move a limb of the body ſpontaneouſly, it is confeſſedly action; motion is a ſenſible change: but it is no leſs action to hold the arm ſtraight out, than to put it at firſt

into that poſture, which we may be ſenſible of, becauſe we ſoon find ourſelves unable to continue it thus for any time (*p*); and that is no ſign of *inaction*. And agreeable to this, a cloſe attention of thought to the ſame thing, is more fatiguing than frequent changing; there being, as was ſaid above, a relief and pleaſure in variety of objects. So far is it from being true, that changing the acts of the *will* is only action. And this is one reaſon that *hiſtory*, *poeſy*, &c. are more entertaining, to thoſe who have not acquired a ſteddineſs of attention, than mathematical and abſtract reaſoning. This ſhews us that the ſoul is active and buſy, in the ſtilleſt intervals of muſing and thinking: and as we have ſeen in N° 4. that action neceſſarily implies perception; ſo in this caſe, perception naturally infers action: that is, though perception doth not neceſſarily imply action; yet it is here a natural ſign of it. When we fall heavy with ſleep, or ſink from a waking to a ſleeping ſtate, we loſe gradually the perception of external objects, or whatever we were thinking of, as the mind ceaſes to be active in applying the attention to them; till all degenerates into an *internal ſcene* of thinking, where the mind is ſtill active and perceptive of, and about other objects.

We may farther obſerve, that if thinking were not action, a man might run a race, and ſtudy a hard theorem at once; for that would be only to run, and do nothing elſe. It partly proceeds from the ſimplicity of the attention, of which hereafter; and partly from the limitedneſs of the active power of the ſoul, that it can do, or be intent upon one thing only at a time; and if thinking were doing nothing, the doing any thing elſe would not exclude it. And as this helps to ſhew us, that thinking is action, in whatever degree of intenſeneſs; ſo it aſſiſts us, in ſome manner, to get a tranſient glance of the boundleſs, adorable power and perfections of the *Deity*, who performs an infinity of actions, infinitely different, all at once, in all places, without perturbation or perplexity. We have ſcarce any other way of ſeeing the greatneſs of his perfections, but by bringing them into compariſon with what *is difficult to us*. When they become great beyond a certain pitch,

(*p*) *Hoc* [*tremorem induci, ob defectum ſucci ſpirituoſi*] *confirmatur ex eo, quòd viri alioquin robuſti, pondus proprii brachii extenſi ſuſtinere non poſſunt, continuatâ actione* [here it is called action] *per horam integram, abſque tremore. Quia nempe, ob continuatam effuſionem ex iiſdem nervis, ſucci ſpirituoſi diſſipantur, & deficiunt, & proinde, interruptis vicibus, & minutis ſtillicidiis exprimi poſſunt.* [In which intervals the arm muſt yield and ſink down a little.] *Borell. de mot. animal.* Part 2. Prop. 216.

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we loſe the ſenſe of their greatneſs; and, if I might ſo ſay, *by ſtill increaſing they become leſs to us.*

XVIII. To confirm farther the inceſſant activity of the ſoul conſidered in its own nature, we may next obſerve that as all *willing* is action, ſo this *willing* is the only action of the human ſoul; or all that it doth when it acts, is only exerting an act of volition. When it moves the animal ſpirits, in order to move any part of the body, it only *wills* the motion. It knows neither why the motion is performed, or how it is performed; but if the body be rightly diſpoſed, it will be performed in conſequence of its volition. In like manner in its own internal operations of thought and reaſoning, it performs no other kind of action but *willing*; for it is neceſſary in ſeeing the identity or diverſity of its own ideas, after the will hath applied the perceptivity to them; as ſhall be ſhewn. No *agent* indeed can act, without *willing* the action; but the difference to be taken notice of here is, that the human ſoul in particular, only *wills* the action, and is forced to depend upon a *borrowed power* for the execution of what it *wills*. The ſyſtem of nature round it, as was ſaid, is ſo wonderfully contrived, that the execution of its *will* is performed, blindly as to it. And it is difficult to ſay, whether this is a greater mark of the wiſdom of the Contriver, and of its dependence upon him; or of his goodneſs and condeſcenſion, in being ſubſervient to the will and ſpontaneity of his creatures. But *willing* is a thing that coſts us no pains; it is full as eaſy to us *to will a thing*, though the effecting it might not be in our power, as *not to will it:* though there may be an inequality in the diſpoſition of our bodies at different times, there is none in the *power* of *willing*. And when it is freed from this inequality, as it will be in a ſtate of ſeparation, or in a ſtate of union with a ſyſtem of matter liable to no diſorder, *action* in all reſpects, will be as eaſy to it as *inaction*; ſince its own proper action, even here, is as eaſy. Let us call to mind a little, that it is a repugnancy in thought, to ſuppoſe an active ſubſtance feeling any difficulty from itſelf in acting. It muſt be *ſomething inactive* that gives it any uneaſineſs to act; that is, ſome dead ſubſtance. If it felt uneaſineſs from itſelf, it muſt be from *ſome part* of it, that wanted to be actuated; that is, ſome *unactive* part; that is, ſome part not of active ſubſtance (for of ſuch parts active ſubſtance could never be made up); and that is, ſome part *not of itſelf*.

XIX. Let us reflect *how neceſſarily we become active and percipient again* (of external objects, I mean) *after ſleep.* It is as little in a man's power to continue ſleeping at pleaſure, as it is to fall aſleep when he liſts; though his life depended on it. This would be a great happineſs in many caſes, and a *ſingular privilege.* Certainly it is not the right order and diſpoſition of the body, that thus *forcibly* reſtores action, and perceptivity to us; for then we ſhould need no other principle to actuate and enliven us at any time; but the order of dead parts would make them living and rational *(wiſe, learned, and laughing,* in *Lucretius*'s phraſe); and the effect would be perfecter than the cauſe, not only in degree, but in kind; which would put an end to all reaſoning, (of which by and by). This therefore can proceed from nothing but the nature of the ſoul itſelf, which is neceſſarily active and perceptive in itſelf, and *ſheds* life and perception (ſo to ſpeak) through *the body*, when the right diſpoſition of that returns. The ſoul in ſleep ſeems to ſuffer ſomething like what happens to a *live-coal*, covered up under the aſhes; which is alive all the while, but only appears ſo, when diſencumbered, and expoſed to open air. As the coal would at any time diſcover itſelf, and kindle up any combuſtible matter applied to it; ſo the ſoul neceſſarily enlivens a rightly diſpoſed body. We cannot ſuppoſe it like a dead cinder: for as that, of itſelf, could never become a live-coal again; ſo neither could the ſoul recover life and action, of itſelf, if it were, for any the ſmalleſt time, in a ſtate analagous to that of a *dead cinder.*

XX. We may conceive, I think, without much ſtreſs to the imagination, that when two ſubſtances of contrary natures, an *active* and *inactive* one, are joined together in a ſtate of union, they ſhould ſo affect each other, that the whole compound ſhould not appear perfectly dead, nor perfectly living; which is the very appearance we make: and that, as the one or the other principle prevailed, the compound ſhould ſeem to partake of that nature. This is not hard in general to conceive; though the formal method how they affect each other may not be conceivable by us. It is certain enough, from what is ſaid in the ſecond ſection above, that gravity, or elaſticity, by which a *clock* or a *watch* goes, is the action of an immaterial ſubſtance upon matter. We can as little conceive the formal manner of his impulſe or impreſſion, as how the ſoul affects the matter of the body, or is affected by it. This very common inſtance *includes in*

itſelf really all the difficulty that is in the mutual action of matter and ſpirit on each other. Yet becauſe a man cannot conceive how it is, that an immaterial impulſe conſtantly impreſſed ſhould make a watch go, this would not make him deny the evidence of truth, or ſay, that either it doth not go, or goes without any power. And, to purſue this a little farther, if we conceive *this force* much ſuperior to the *inertneſs*, or *friction* of the matter to be moved, the machine will go eaſy and lightly; if it is but little ſtronger, that will be moved ſlowly and with difficulty; but if it is only barely equal, there will be an *equilibrium*, and all the movements will ſtop; and *if it is inferior*, the machine, ſo to expreſs it, is *more dead*. Now, if inſtead of ſuppoſing the force different, we ſuppoſe the diſpoſition of the parts to be moved, different at different times, the ſame conſtant force remaining and acting; all the ſame different appearances will happen: the machine will ſeem briſk and lively; faint and languid; ſick, or quite dead, (to ſpeak metaphorically); as the indiſpoſition of the parts balances the active force more or leſs.

Compariſons do not hit in all particulars: yet it is not difficult to apply this to the caſe of the body as actuated by the ſoul; nor is there any conſidering perſon, I think, who may not ſee from this inſtance (in ſome manner parallel) how frivolous thoſe objections are, which the Sceptic brings from the inequalities obſervable in the body, to prove the ſoul material. For though it may be ſaid, that the *force* which moves the limbs doth not belong to the ſoul, as hath been ſhewn before; yet that need be no objection to the compariſon: for the diſorder of the parts certainly hinders that force from being exerted, and the command of the ſoul over the body to appear; ſince it hath likewiſe been ſhewn, that *this force* is ſubſervient to the *ſpontaneous mover*; and therefore in the preſent caſe may be conſidered as its own force.

XXI. From the ſoul's neceſſarily actuating the body, either during its being rightly diſpoſed, or as ſoon as the indiſpoſition of it is rectify'd, it farther appears, that the *law of their union* is ſuch, that only a final ineptitude of the body to be actuated, can ſeparate them: for they ſtill continue united, notwithſtanding any indiſpoſition which can be rectify'd. And therefore the ſoul is not at liberty to act by itſelf, before that *final ineptitude* or diſorder happens. We need not wonder why the ſoul doth not act by itſelf, when the body is not fit to be actuated by it: it hath no liberty but what is indulged it, by the *Being* who appointed this *union*; and

and if it had such a liberty, the union would be in vain. The soul would always chuse to act by itself, retiring from the body while it were indisposed, that it might enjoy a separate and unpainful state of existence. And since the body, in its present constitution, must always give the soul some uneasiness, less or more; as also since, when best disposed, it must retard its application to many objects; the consequence would be, that it would never chuse to actuate it, or to act by it, more than a man at liberty would chuse to walk with fetters on his legs. A little taste of separate existence would put men upon all expedients of dissolving the union violently. Thus such a liberty would have been abundantly inconsistent with the design of uniting them together. It is rather wisely instituted, that we naturally seek to prolong the union, that it may appear how we approve ourselves, in this our state of *novitiate*. I might mention here another kind of inconveniencies that would ensue from this power indulged to the soul, to the overturning of human society: if we consider the *lust*, *avarice*, *revenge*, &c. of mortals, who would thus come to know more perfectly the means of accomplishing all their bad designs. No method of security would be safe, or secret; nor any method of ruin unknown, to the utter confusion of the world. How much better is it then that it should be otherwise ordered! It is true, in sleep the soul acts, and is acted upon, by a different method from the ministry of the senses; but it is all the while in the body, and not trusted to its own discretion.

But this whole appearance of dreams shall be considered at large a little farther on. In the mean time, I cannot help being concerned to find some great and learned men taking the *wrong side* of ambiguous appearances, and falling in with the sceptical notions of the world, by insinuating *that the soul owes the perfection of rational thinking to the body*; and this in order to maintain another *hypothesis* of no very great consequence in itself, though it were true in this state of union, *viz. that the soul thinks not always (q)*; which yet is not easily to be proved, even though the activity of

(q) Essay concerning human understanding, B. 2. ch. 1. sect. 16. "'Tis true, we have sometimes "instances of perception, whilst we are asleep, and retain the memory of those thoughts; but "how extravagant and incoherent they are for the most part; how little conformable to the per- "fection and order of a rational Being, those who are acquainted with dreams, need not be told. "This I would willingly be satisfied in, whether the soul, when it thinks thus apart, and as "it were separate from the body, acts less rationally than when conjointly with it, or not; if "its

of *ſpirit* be clogged with dead matter, and is certainly falſe in a ſtate of ſeparation. That I may not be miſunderſtood, I do not mean that any man *ſhould lye for the ſake of truth*, (truth ſtands in need of no ſuch help, but rejects it;) nor that one ſhould avoid any difficulty, or not conſider all ſides of any *appearance:* but what I complain of is, *the not conſidering* all ſides of any appearance from which a weighty inference ſeems to be drawn, eſpecially if it be perplext in itſelf; as the appearance of dreams certainly is. If the ſoul were indebted to matter for the perfection of rational thinking, matter would be the perfecter *Being* of the two; which it would be abſurd to ſuppoſe: and if thinking, or *activity* (and that the higheſt kind of activity) doth not belong to the nature of immaterial ſubſtance, it muſt be *merely accidental* to all ſubſtance; which is no leſs abſurd. This laſt I have ſhewn falſe in what is ſaid before (N° 3.) And an endeavour to remove the pretence which our dreams may give for ſuggeſting, that the ſoul owes the perfection of rational thinking to matter, together with ſome other reaſons to be mentioned hereafter, will, I hope, plead my excuſe for offering an *eſſay* on that intricate ſubject.

XXII. We may farther obſerve, the firſt nine paragraphs of this ſection being duly conſidered, that they who placed the eſſence of the ſoul in thinking, rather expreſſed their meaning unwarily, than had falſe conceptions of the nature of it. If eſſence and exiſtence have different meanings (as in propriety it ſeems they ſhould), by eſſence, I think, can only be meant, the abſtract natures of things; or the ideas of the things in the divine intellect, which were before the things themſelves exiſted. Mr. *Locke* rather takes eſſence for the *Being* of any thing (*r*); though we uſually

" its ſeparate thoughts be leſs rational, then *theſe men* muſt ſay, *that the ſoul owes the perfection of* " *rational thinking to the body*; if it does not, 'tis a wonder that our dreams ſhould be, for the " moſt part, ſo frivolous and irrational; and that the ſoul ſhould retain none of its more ra- " tional ſoliloquies and meditations." We ſhall afterward ſee, *who in this place* aſcribes the perfection of rational thinking to the body; however here is a broad hint for material ſouls. What is *for the moſt part only*, is not *always*; that ſide ought to have been conſidered alſo. I hope it will appear, that the moſt incoherent of our dreams, is an appearance far above matter, or any power matter can be endued with: and that, upon a narrow examination, the actions properly of the ſoul, in dreaming, will not be found ſo irrational, as is here preſumed, and generally conceived.

(*r*) ——— " But ſince the eſſences of things are thought by ſome (and not without " reaſon) to be wholly unknown; it may not be amiſs to conſider the ſeveral ſignifications of " the

ally say, such a property is of the *nature* or *essence* of a thing, taking either word indifferently; but never that it is of the *Being* of it, which rather imports its *existence*. Be it as it will, there can be no great mistake in saying, a property is of the essence of a thing, when that thing cannot be conceived without this property. Now, by N° 2, and 5, above; it is contradictory that the soul should at any time, even while united to the body, be without the power of action, that is, of thinking; for reflection is action; and thinking, or reasoning, is reflection. And by N° 7, 8 and 9, it is contradictory that, in a state of separation, it should not always be active, or exercise this power. And by the reasoning in N° 7 and 19, it appears that it is only the indisposition of the body, that can interrupt the exercise of this power at any time. So that, if they had made a distinction between *activity* and *real action*, and excepted some

" the word essence. First essence may be taken for the *Being* of *any thing*, whereby it is, what it " is, and thus the real internal, but generally in substances, unknown constitution of things, " *whereon* their discoverable qualities *depend*, may be called their essence. This is the pro- " per original signification of the word, as is evident from the formation of it; *essentia* in its " primary notation, signifying properly Being, *&c.*" *B.* 3. *ch.* 3. *sect.* 15. Here (not to mention that it is not extraordinary for the signification of a derivative word, especially in a philosophical acceptation, to differ very widely from the grammatical meaning it might have according to the form it is derived in) the word [*Being*] I think, is equivocal, and signifies the *internal unknown constitution of things*, less properly, at least less commonly, than any other thing. The *being of a thing* is oftenest taken in opposition to the *not-being* of it; and then it is the same as the *existence* of it. We say such a thing is not *in being*. And sometimes it imports both essence and existence; as when we say *we have our Being from God*; that is, both our existence, and our nature or essence. But granting that *essence*, *being*, and *the internal unknown constitution* of substances, are properly the same thing; since this internal unknown constitution once existed not, and yet was known then in the *divine intellect*, it must have been in idea there. So that at last, in any acceptation of the word, we must resolve the essence of things into *idea*, and make it the same with their *nature*.

There is one thing farther may be observed from the place here cited. Mr. *Locke* allows that the internal, unknown constitution of things is *something*; since their discoverable qualities are owned to depend on this; which, I think, is very right, for qualities cannot depend on *nothing*. This is taken notice of, because sceptical men begin to suppose they have Mr. *Locke*'s authority for insinuating that the unknown constitution of things is in itself nothing; and that *substance*, or what *he* calls *substratum* is but empty sound. But if there is any such thing as qualities or properties, there must be some *farther thing* to which they belong; since a quality could not subsist by itself, or without a subject. This *other thing*, if we speak of it at all, must be called *subject*, *support*, *substance*, or some such name; let these men ridicule as much as they please. For though we know not what this substratum or support of properties is, nor have any particular idea of it; yet we know *that it is*, unless properties could subsist by themselves. And if there be neither *properties* nor *subject*, there would be nothing left to exist.

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certain intervals of inaction perhaps (though none of this caution was abſolutely neceſſary, as will appear immediately); no body could have taken exception to their opinion. If we take away from our complex idea of a *ſubſtance*, the particular ideas of thoſe properties, by which only we collect that it is a ſubſtance, we take ſuch complex idea quite away; ſince it conſiſts only of thoſe particular ideas. If we take away from our idea of matter, thoſe of ſolidity and extenſion, we leave ourſelves no idea of it remaining. After the ſame manner, if we deny activity and perceptivity concerning ſpiritual ſubſtance, by which we can only collect it to be a ſubſtance, we deny every thing we know concerning it; or we deny ourſelves to have any idea of it; and reaſoning about it as without theſe powers, we reaſon preciſely about nothing, of which we have any particular idea. To ſay it may ſtill be a ſubſtance without theſe powers, is to ſuppoſe it *dead ſubſtance*, which could never come to the exerciſe of theſe powers again if it had once loſt them, as we ſee it doth. And therefore it can never be without them. Solidity ſeems not more neceſſary to the conception of matter than activity and perceptivity to the conception of ſpirit. And ſince conſidered abſolutely in itſelf, it cannot *not exerciſe* theſe powers; the juſteſt idea of it is, that of an *active perceptive Being*, which we cannot conceive in itſelf, without real action and perception. Mr. *Locke* ſays, it is not neceſſary to ſuppoſe the ſoul always in action, and that thinking may be to the ſoul what motion is to the body: not its eſſence, but one of its operations (*s*). But with ſubmiſſion to ſo great a name, there is this material difference, *motion* is no more the action of matter than *reſt* is; it is equally inactive in both, as hath been ſhewn. Matter ſtands in need of an *external cauſe* to put it into

(*s*) "I confeſs myſelf to have one of thoſe dull ſouls, that doth not perceive itſelf always to "contemplate ideas, nor can conceive it any more neceſſary for the ſoul always to think, than "for the body always to move; the perception of ideas being (as I conceive) to the ſoul, "what motion is to the body, not its eſſence, but one of its operations; and therefore though "thinking be ſuppoſed never ſo much the proper action of the ſoul; yet it is not neceſſary "to ſuppoſe that it ſhould be always thinking, always in action. That perhaps is the pri-"vilege of the infinite Author and Preſerver of things, who never ſlumbers nor ſleeps; but is "not competent to any finite Being, at leaſt not to the ſoul of man. We know certainly by "experience, that we ſometimes think, and thence draw this infallible conſequence, that there "is ſomething in us that has a power to think; but whether that ſubſtance perpetually thinks, "or no, we can be no farther aſſured than experience informs us." *B. 2. ch. 1. ſect. 10.* The reaſon why it is improper to refer to experience in this caſe, will appear immediately.

motion, or bring it to reſt again; but the ſoul doth not want an *external mover* to ſet it a thinking. And therefore there is no room to run a compariſon between the action of the ſoul; which neceſſarily ſprings out of its own nature, and the motion of matter, which muſt be excited in it, by *ſome Being* not material. This looks as if *action* were equally extrinſick to them both; or as if it were as natural for the ſoul to be without action, as for matter to be without motion; which is to pervert our juſteſt conceptions of ſpiritual ſubſtance.

Beſides, allowing Mr. *Locke*'s acceptation of the word eſſence, that it is the real, internal, but generally in ſubſtances, unknown conſtitution of things; it will not follow that every thing is ſeparable from ſubſtances, which is not this real internal conſtitution, as he ſeems to take for granted. The properties that immediately flow from the internal conſtitution of things, are as inſeparable from them, as that conſtitution itſelf; and we can as little conceive the thing without theſe properties, as without that conſtitution. *Diviſibility*, figure, magnitude, are not the internal conſtitution of matter, but properties neceſſarily flowing from it; and yet we can as little conceive matter without theſe, as without its own internal conſtitution; that is, we can as little conceive it without theſe, as *without ſubſtance*. This muſt be ſo; for it is by theſe that we conceive it all to be a ſubſtance, or to have an internal unknown conſtitution. And for a like reaſon, activity and perceptivity, by which powers alone we diſcover that there is a ſubſtance different from matter, and which is the neceſſary ſubject of their inheſion, muſt be in the mind, even previous to the internal unknown conſtitution of that ſubſtance; as neceſſarily as it, and with much more clearneſs than an *unknown thing* can be. If it were pardonable to run ſo high, I might ſay that thoſe very powers of activity and perceptivity, which are not the internal unknown conſtitution of ſpiritual ſubſtance, are yet inſeparable from the *neceſſarily exiſting ſpirit*; and the conſtant exerciſe of them alſo; as Mr. *Locke* obſerves, in the place laſt quoted from him.

But then, as to his acceptation of the word eſſence; as it ſeems not juſt in itſelf, ſo, I think, it is inconvenient in philoſophy. The word, Being, by which he explains eſſence, rather imports the actual exiſtence of a thing, than its internal unknown conſtitution, as hath been obſerved. Thus Dr. *Clarke* calls his excellent book, *A Demonſtration of the Being and Attributes of God*; that is, a demonſtration that there really exiſts a God, and what his attributes are. It would have ſounded ſtrangely to have

ſaid, a demonſtration of the eſſence, or internal unknown conſtitution, *&c.* And then, if ſubſtances have unknown eſſences, and other things have not; it will either follow, that there are two different ſpecies of *eſſences*; or that other things beſides ſubſtances have *no eſſence at all.* This hath thrown Mr. *Locke* upon the diſtinction of *real* and *nominal eſſences*; which, though it hath obtained, ſince he wrote his Book, yet I humbly beg leave to ſay, I do not ſee any ſervice it hath done to philoſophy. And this again hath thrown him upon the abſurdity of aſſerting that all our *moral* and *mathematical ideas*, thoſe of virtue, vice, juſtice, temperance; a circle, ſquare, cube, triangle, *&c.* (things of as *fixt* and *immutable* natures, as any that can be named) having only, according to his diſtinction, nominal eſſences, are nothing but the mere arbitrary compoſitions of ideas in our minds: which admitted, would be of the greateſt *diſſervice* both in *philoſophy* and *practice*, as ſhall be ſhewn elſewhere.

XXIII. This farther may be ſaid for thoſe, who place the nature of the ſoul in thinking, and ſuppoſe it to think inceſſantly, (taking thinking in the ſenſe of being always percipient of ſome idea or other) That it is impoſſible to ſhew the contrary, even in this ſtate of union with the body; though it hath been here allowed, and often ſuppoſed, to avoid unneceſſary debates in improper places. Who can ſay that ever he found himſelf in a ſtate of unconſciouſneſs; or when there was no idea at all ſubſiſting in his mind? Indeed it is contradictory that any man ſhould ſo ſurprize himſelf, impercipient to wit, of all things, with reſpect to the *preſent time:* for he is conſcious by ſuppoſition, and reflecting upon an unconſcious ſtate. And as to the *paſt time*, he cannot have any memory of ſuch a ſtate: for whether ever ſuch a ſtate *was*, or *was not*, it is either way a contradiction that he ſhould remember it; and he cannot bring an argument for it, from his not remembering of it. If a man came through a dark room, he may be certain there was no light there; for his eyes were open, and he miſſed the light: but if a man paſſed an hour of unconſcious exiſtence laſt night, there is a wide difference. He did not perceive an abſence of conſciouſneſs then; nor can he now; ſince he could do it but by remembering it. He hath not two diſtinct conſciouſneſſes, one to be extinguiſhed, and another remaining to perceive the abſence of the firſt: He doth not perceive at the time, and therefore cannot recollect afterward the laſt thought he was conſcious of, at the beginning of the blank, nor the firſt upon emerging out of it, (to be the two ex-

tremes, as it were); nor the diſtance and length of time betwixt. By Mr. *Locke*'s own arguments concerning the idea of duration, he muſt think theſe two extremes contiguous; and therefore conclude, that he had been conſcious without intermiſſion. It is eaſy for a man to confeſs, *that he hath one of thoſe dull ſouls, that doth not always perceive ideas*: but I beg leave to obſerve, that this *modeſty*, which is deſigned to paſs for an argument, is ſomewhat *inaccurate*; for he confeſſes a thing for certain, which he can never be certain of. It is not in the power of the ſoul to become impercipient of ideas at pleaſure: and were the thing effected, it would be the ſign of an ill diſpoſed body, and not of the dulneſs of the ſoul. It is ſtrange enough to appeal to experience (*t*) for the reality of a ſtate, which by ſuppoſition, is an utter negation of all experience. It is true, the argument is very good, that a man cannot think at any time, waking or ſleeping, without being ſenſible of it (*u*): but this reſpects the preſent time, and is far from concluding, that a man cannot think ſleeping or waking, without retaining the memory of theſe thoughts afterward; which yet is the thing deſigned to be concluded by it. Why elſe ſhould experience be alledged, which is the memory of things paſt? It were to be wiſhed that he had told, what author it is that aſſerts, that the ſoul in a ſleeping man thinks, without being conſcious of it; upon which he asks the queſtion, Whether, during ſuch thinking, it has any pleaſure or pain, or be capable of happineſs or miſery? and adds, *I am ſure the man is not, no more than the bed or earth he lies on* (*v*). Becauſe it is ſtrange, if any man put him to the trouble of confuting this con-

(*t*) —"And laſt of all ſound ſleep cloſes the ſcene quite, and puts an end to all appearances. This, I think, almoſt every one has experience of in himſelf, and his own obſervation without difficulty leads him thus far." *B.* 2. *ch.* 19. *ſect.* 4. But this is only experience of having no memory of conſciouſneſs then, which doth not infer that we had no conſciouſneſs then. When an Evidence makes oath, that his memory doth not ſerve him ſo far, how much proves he by this? Nothing ſurely on either ſide. He only owns that the point in controverſy might have been ſo, or otherwiſe, for any thing he can remember. Mr. *Locke* ſays, (*ch.* 1. *ſect.* 10.) "the queſtion is about a matter of fact." To this I reply directly, the queſtion is about a matter of *not-fact*; about a negation of all fact. Every body allows we are generally conſcious; this is not the queſtion then: But if we are ſometimes without conſciouſneſs. It is abſurd to ſay, we forget our unconſciouſneſs; it is abſurd to ſay, we remember our unconſciouſneſs. Where is the matter of fact to be teſtified to then? Or how is experience applicable? Let a definition of experience be given.

(*u*) Ch. 1. ſect. 10.

(*v*) Ibid. ſect. 11.

tradiction,

tradiction, with the ſuppoſition of *Caſtor* and *Pollux*, *Socrates* and *Plato*. The poſition his adverſaries maintain infers no ſuch contradiction; nor juſtifies another to infer it for them. There is certainly a great deal of our paſt conſciouſneſs, which we retain no memory of afterward. It is a particular mark of our finite and imperfect natures, that we cannot become conſcious of all our paſt conſciouſneſs at pleaſure. But no man at night would infer, that he was not in a ſtate of conſciouſneſs and thinking, at ſuch a certain minute about twelve a-clock of the day, becauſe now perhaps he hath no memory what particular thought he had at that minute. And it is no better argument, conſidered in itſelf, that a man was not conſcious at ſuch a minute, in his ſleep, becauſe next morning he hath no memory of what ideas were in his mind then. A man cannot be conſcious of the laſt idea he hath in his mind when he falls aſleep; the moſt he can do here, is to recall the laſt idea he hath any memory of: but this doth not prove it *the laſt*. We have rather memory and experience of our ſliding gradually from a ſtate of *waking*, to that of a *ſleeping conſciouſneſs*: and though the particular idea that divides the one kind of theſe conſciouſneſſes from the other, is not aſſignable; for there is really, I believe, no ſuch idea, but a gradual tranſition, or degenerating of the one ſtate into the other; yet if we are caſually awakened a little after our falling aſleep, and take time to obſerve, we ſhall eaſily enough *trace back* the laſt ideas and conſciouſneſs that occupied the mind, for ſome little time at leaſt. Juſt ſo, if we take time in the morning to reflect, before we let in the thoughts of buſineſs, and our familiar waking ideas, to efface the ſlender impreſſions and images made in ſleep, we ſhall eaſily diſcover ſome of thoſe that occupied the perceptivity laſt. And the ſame thing happens at any intermediate time, due attention being given, and waking thoughts being kept from ruſhing in too ſuddenly. And ſince this happens at any time indifferently, it is at leaſt a probable argument, and repeated experiment, as it were, which when duly made, always ſucceeds, and ſhews that the matter of fact is probably as thoſe philoſophers ſuppoſe it (*x*).

(*x*) Mr. *Locke* doth not repreſent the objection right in his *Sect.* 14. *ch.* 1. *b.* 2. It appears from this, that it is not only not impoſſible, but eaſy, to forget on being awakened, what we were dreaming the minute before. And due care being taken, it is certainly alſo not impoſſible to obſerve it in many caſes. A very remarkable Author, writing on this ſubject, hath theſe words. *I ſuppoſe the ſoul is never totally inactive. I never awaked, ſince I had the uſe of my memory, but I found myſelf coming out of a dream. And I ſuppoſe they that think they dream not, think ſo, becauſe they forget their dreams.* M. *R. B.* in his defence of the ſoul's immortality.

XXIV. Though the point were not to be accurately determined on any ſide; probability inclines moſt to the inceſſant action and perception of the ſoul, even in this ſtate. There is nothing more common than to remember a ſcene of viſion, which we have had in ſleep, ſome conſiderable time after, from ſomething that then happens to ourſelves or others; and which without this occaſion given to the mind, of thus recollecting it, we ſhould perhaps never have recovered. And certainly, at any time before this recovery, the argument, that then the mind was unconſcious, becauſe we retained no memory of it, would not only have been bad, but falſe. Of how much conſciouſneſs, and activity of the ſoul, do we loſe the memory every night, becauſe of the ſlenderneſs of the impreſſions, which are eaſily diſturbed, as the day thoughts ruſh in; or becauſe of the ſhortneſs of the duration? *Volucrique ſimillima ſomno*, is a very expreſſive compariſon for any thing that is *fleeting* or *ſhy*. The viſions offered to us in ſleep, are often independent and without connexion; probably often deſigned to contradict each other, and our waking thoughts too; which makes them to be remembered with more difficulty than our waking thoughts. Yet frequently *theſe laſt* have the ſame diſadvantageous qualification, and are difficultly retained. A ſcene muſt have a natural coherence to be eaſily remembered. Memory is chiefly aſſiſted, perhaps, in this ſtate of union, by ſenſible impreſſions made on the organ, and there preſerved for ſome time at leaſt. Theſe are fading and tranſitory, and in ſleep moſtly clouded over, by the nature of that indiſpoſition; which is the reaſon why we cannot then uſe our paſt experience, or memory of things; to convince ourſelves that the appearances offered to, or forced upon the ſoul in ſleep, are not in truth exiſting externally; for the internal repreſentation is as real, as if the object of it exiſted from without. But poſſibly we ſhall diſcover a view of *a ſuperior faculty of reminiſcence* in proceeding to examine this appearance, which is *independent* of a corporeal organ, or ſeat of impreſſions made on the ſenſory. We are by no means juſtified in philoſophy, to draw weighty inferences, ſuch as that the perfection of rational thinking may depend upon matter, or that the ſoul may owe its perceptivity and life to that dead ſubſtance; I ſay, we are by no means juſtified in drawing ſuch weighty inferences from a perplexed and dark phænomenon, without narrowly examining the nature and circumſtances of it, as far as they are acceſſible to us. And it is not to be diſſembled by Mr. *Locke*'s greateſt admirers, that his method of reaſoning all along on this ſubject, tends to lead

weak

weak and ſceptical men, to make theſe inferences; not to ſay that he points out the way to them, by hinting broadly at theſe inferences himſelf. It looks as if he not only thought it poſſible that matter might think, but true that the ſoul was really matter, when he ſays, "I "grant that the ſoul in a waking man, is never without thought, be- "cauſe it is the condition of being awake: but whether ſleeping without "dreaming be not an affection of the whole man, *mind as well as body*, "may be worth a waking man's conſideration (y)." Then it ſeems ſeparate ſouls may ſleep. *God differs from his creatures in higher prerogatives, than that he doth not ſlumber nor ſleep.* It is here granted, that while we are awake, we are under a neceſſity of thinking. If then we were always awake, we ſhould be always under that neceſſity. ——— How comes it then that we are not always awake? ——— Is it the defect of the ſoul? ——— This was the *chief point* to have been conſidered, in order to conſider the appearance on all ſides. It hath been ſhewn that ſpirit hath *no parts*; and therefore it ſtands in need of no reparation, or re-diſpoſing its parts aright; as the body doth, which conſiſts of parts that are conſtantly changing, and liable to be diſordered. This ſhews on which ſide the indiſpoſition lies. Again, we have undoubted experience, that the ſoul thinks and lives, while the ſenſes are ſhut up, and can miniſter nothing; while the body is laid up to be refitted, a mere vegetable ſyſtem: and I have ſhewn, that it implies a contradiction to ſay, we have experience of the contrary. And what is the plain inference from ſuch oppoſite ſymptoms? Laſtly, allowing all that is alledged, *viz.* that ſometimes we ſleep without dreaming; is it therefore to be inferred, that ſleep is an affection of the ſoul? Is it not conceivable to any man of *plain common ſenſe*, from what I have ſaid (N° 20.) concerning the difference of appearances, that two oppoſite ſubſtances, a *dead* and a *living*, muſt make by being united; and from what I have ſaid concerning the perceptivity of the ſoul, in itſelf not bounded, but limited in its union with body, (ſee the note *(n)* N° 15.) is it not eaſily conceivable, I ſay, from theſe conſiderations, that its activity may be quite hindered from being exerted; and its perceptivity entirely impeded, by a farther limitation, (granting that to be the caſe) without ſuppoſing that it is laid up to be refitted, in ſleep, as the body is; or making ſleep an affection of immaterial being? If a man puts in a bit of

(y) Ibid. ſect. 4.

paper

paper to hinder the balance of his watch from beating, or if this is effected by any other diſorder of the parts; it would be improper to ſay that the immaterial impulſe, or power, by which ſhe goes, is then aſleep, though it be hindered from having effect.

XXV. There is one argument brought by Mr. *Locke*, which is boaſted to be deciſive, as fully proving that thinking is not inſeparable from the ſoul. It is, that action may be *remitted* or *intended*, ſometimes more and ſometimes leſs; a variation which it is not conceivable the eſſences of things can be ſubject to (*z*). This is indeed ſpecious at firſt view, and yet it is a very equivocal argument, and concludes different ways, according to the different acceptation of the word *eſſence*. He grants that thinking is action, and ſuppoſes eſſence to be the internal, unknown conſtitution of things, whereon their diſcoverable qualities depend. Now that thinking or action, which is a known property of the ſoul, ſhould be the internal unknown conſtitution of the ſoul, is a contradiction; and proving the contrary, is proving what was never denied. But this is not the genuine acceptation of the word *eſſence*. (See the note *(q)* N° 22.) A late Author hath rightly obſerved, that *eſſence is explained by the chief and radical property of a thing, or all the properties of it.* Hence the chief and radical property is the eſſence of any thing in idea, though the thing ſhould not exiſt, nor have any internal unknown conſtitution. *Eſſence* (as the ſame Writer remarks) is very different from *exiſtence:* the eſſence or nature of things is *invariable*, and their exiſtence only *contingent*. From this we may ſee the fallacy of Mr. *Locke*'s argument: he makes eſſence the internal unknown conſtitution of things: and becauſe it is contradictory that *thought* ſhould be of the eſſence of the ſoul in this ſenſe, he infers it is not of the eſſence of the ſoul in the other ſenſe, or ſo as to be inſeparable from it. This is as if I ſhould ſay, A circle is a figure contained under four equal ſides, making four right angles; but there is no point within this figure, from which all the lines drawn to the ſides are equal: therefore it is not the eſſential property of a circle, that all the lines from a point within it to the outſide ſhould be equal. That thought is eſſential to the ſoul in the laſt ſenſe, is eaſily proved. For it muſt be eſſential to one of the two ſubſtances, *i. e.* either to matter or ſpirit; otherwiſe the higheſt perfection in nature muſt be but merely caſual, or an extraneous ac-

(*z*) B. 1. ch. 19. ſect. 4.

cident

cident in the univerſe: and ſince it hath been ſhewn that thought can neither be eſſential nor accidental to matter, it muſt be eſſential to ſpirit, or ſuch a property as cannot be ſeparated from it without deſtroying its nature. Or we may argue thus: If thinking is eſſential neither to body nor ſoul, how come we at all to think? Is it by mere accident? If it is by mere acccident, it is poſſible the ſoul ſhould never think. If it be ſaid, the ſoul *lays down* and *takes up* thinking at its pleaſure, [by its own power, by its own will, command, or any other way that can be named] it is a direct contradiction. If the ſoul pleaſes to take up thinking after intermiſſion, [or if it *wills*, *commands* this] it muſt be previouſly thoughtful. If it be ſaid, it ſtands in need of ſome external principle to bring back thought to it; this is to own that it would never think again of itſelf, but be a dead inactive ſubſtance for ever after ſuch intermiſſion, unleſs thus reſtored by ſome external Being. And the argument muſt come to this on Mr. *Locke*'s hypotheſis, if the ſoul were for any the leaſt time without thought. The power of thinking in a ſubſtance once dead, is not to be conceived, becauſe it is contradictory. Life itſelf conſiſts in being percipient, in this we are neceſſary. And if we are percipient, we muſt have perceptions, by the terms. Thus it is very conceivable that the ſoul ſhould *remit* its activity in thinking, through all degrees, till at length it can *remit* no farther, and finds itſelf neceſſary in having ſome perception or other. Experience confirms this, as far as we can have experience; and reaſon evinces it univerſally: nor can any objection be made to it but only this, that we do not remember all our paſt perceptions, the weakneſs of which hath been ſufficiently ſhewn before.

XXVI. Mr. *Locke*, in his way of arguing, takes it for granted, that if a property doth not enter into the internal unknown conſtitution of a ſubſtance, it is ſeparable from that ſubſtance; which ſtill was the main point to be proved: for, as has been remarked N° 22. a property which neceſſarily flows from the internal conſtitution of any ſubſtance, muſt as neceſſarily belong to it, as that conſtitution itſelf. And there muſt be ſuch properties as *neceſſarily* flow from the internal conſtitution of ſubſtances; Mr. *Locke* owns the diſcoverable qualities of ſubſtances depend on their internal conſtitution: therefore the property muſt always belong to the internal conſtitution of the ſubſtance; that is, to the *eſſence* of the ſubſtance, even in his own ſenſe of the word *eſſence*. Thus *figure* is but a

property of matter, and a variable property; for it may be changed in the ſame individual quantity: yet this variable property *invariably* and *inſeparably* belongs to matter. So thinking, (allowing it a variable property) may invariably belong to the ſoul. And it is only the exerciſe of the power, not the power itſelf which is ſubject to the variation of being *intended* or *remitted*. This doth not make the power itſelf ſeparable from the ſoul. If the power of action were ſeparable from a Being, becauſe the exerciſe of it, or the exerting particular acts, was arbitrary; then activity would be ſeparable from all free Beings, or there would be no ſuch Being: for their freedom in exerting the power would deprive them of that power. But farther, the *exerciſe* itſelf of this power is not ſeparable from free or active Beings; ſince, as hath been ſhewn N° 8. ſuch Beings are not free to act, or utterly to abſtain from all action, but to do this or that action by a preference. Again, Mr. *Locke* himſelf grants, that *thinking is the condition of being awake.* A property then capable of being *intended* or *remitted*, neceſſarily belongs to the ſoul, at leaſt for that time: and if we were always awake, that property would always and neceſſarily belong to it. And ſince we cannot ceaſe being awake at pleaſure, it is not in our power to become unactive at pleaſure; or we are neceſſarily active. And ſince it is the indiſpoſition of the body only that occaſions our not being always awake, it is the indiſpoſition of the body only that hinders our not always exerciſing the power of activity; allowing the ſoul were ſometimes utterly inactive (*a*).

XXVII.

(*a*) Upon the whole of what is ſaid in theſe two laſt paragraphs, the appearance of thinking, or *cogitation*, ſeems to ſtand thus. The ſoul is ſometimes in a hurry of thought, and the tranſitions from object to object are quicker than can be expreſſed. Then it becomes calmer and conſiders things at leiſure; and it may *ſlacken* and *remit* its activity more and more, to a certain degree, till it can go no farther upon the ſide of inactivity; but ſtill it muſt have ſome perception or other *in view*. And when we have come this length, if we would endeavour to keep this *one ſolitary* perception ſtill in view, and be no farther active, we ſhall find a prodigious difficulty in it; or, to ſpeak more truly, it is impoſſible with all the *care* and *attention* we can *beſtow*. Now doth not this ſhew us, that when we would endeavour to be inactive beyond a certain degree, *we increaſe the activity* by that very endeavour? I may compare this effort of the ſoul to the deſcent of a pendulum, which can go no lower than *a certain point*; and a great force to deſcend makes it but riſe the higher on the other ſide. The compariſon only halts in this, that the pendulum will at laſt remain in the *loweſt point*; but the ſoul cannot *reſt* in the perception of one ſolitary idea. It begins motion of itſelf again, if I may ſo ſay, becauſe of its active nature. All this is verified

I ſhall in the laſt place take notice of an objection, which poſſibly may be ſtarted concerning the *ſouls of brutes*. It will perhaps be ſaid,

rified in our own experience. When we compoſe ourſelves to ſleep, and reſolve to think no more till next morning, the reſolution has no effect. The ſoul hath various and innumerable thoughts ſtill ſucceeding one another, which we may eaſily obſerve; till at length (as I ſaid before) all degenerates into an internal ſcene of viſion and dream.

Let us now ſuppoſe that after one dream is ended, another ſhould not ſucceed, but that in the ſoundeſt ſleep the ſoul had no perception at all. Being then *an impercipient ſubſtance* (for four or five hours together perhaps) it muſt be quite dead. If it were not, let any one tell me *what life is*; or wherein it conſiſts? Shall we ſay it conſiſts in the *power of living* only? That is abſurd. If the ſoul is once without perception, how could it exerciſe the power to recover its perception? If we ſay the matter of the body makes it percipient again, or brings back its perception to it, that is no leſs abſurd. If the matter of the body acts upon it, it will perceive the action; but that is not to *make it percipient*, or to bring back perception itſelf to an impercipient ſubſtance. How ſhould the ſoul perceive the action, if it were not awake? Or how could it be awake without perceptions? The ſoul cannot be aſleep, if it is a *ſimple uncompounded Being* that ſtands in need of no reparations; nor could it be always awake without always having perceptions. The very reaſon then why the ſoul is percipient of the action of our bodies upon it, when we awake, is *becauſe it is always awake*, and always percipient. In a dream, when it is certain that the ſoul is *percipient* and *awake*, it is yet not percipient of any external touch upon the body. Why? The action is really not communicated to it. This familiar inſtance ſhews us that the ſoul is awake, but the body is unfit to communicate action to it. How can it be ſaid then that the body by acting on it *makes it percipient*, or brings back its perception to it again; when it is plain that it is percipient already, but that the *nerves* or *ſpirits* are in no capacity to act upon it? This inſtance likewiſe ſhews us, that the ſoul would be percipient of any external touch upon the body while we ſleep, of which it is percipient while we are awake; if the action were communicated to it; and conſequently it diſcovers to us, by way of experiment, on which ſide the indiſpoſition lies, and that ſleep is not an affection of the whole man, *ſoul as well as body*, as Mr. *Locke* inſinuates.

In a word, there is no ſuppoſing the ſoul to be impercipient in ſleep, but by ſuppoſing the perceptivity of it to depend upon matter, which I have ſhewn in many places of this ſection to be a contradiction: or by ſuppoſing that it ſleeps in its own nature. And we cannot ſuppoſe that it ſleeps in its own nature, but by ſuppoſing that it is a *compounded thing*, made up of parts of different natures, ſome of which fly off, or wear out, like thoſe of the body; that is, by ſuppoſing, I think, that it conſiſts of matter and ſpirit. But this is not only falſe, as has been ſhewn in the laſt ſection; but I would argue concerning the *active half* of ſuch a *compounded ſoul*, as I have done already, when I ſuppoſed it uncompounded. The *pure immaterial part* would never need ſleep or reparation. And thus I would purſue the argument through all diviſions, till it were owned that either the ſoul was all *matter*, or that a *pure uncompounded ſpirit* needed no ſleep nor reparation. Now from all that hath been ſaid it appears that the conceſſions which were made in the beginning of this ſection, needed not have been made; or that they were *ſuppoſitions*, or only conceſſions *pro tempore*.

ſince theſe are immaterial, by the ſecond ſection; ſimple, and therefore indiſſoluble, without an act of Omnipotence, by the third; and ſince the fundamental argument in this ſection, That two powerleſs ſubſtances can never beget power between them, nor their union be the cauſe of *that* power, is as applicable to *theſe*, as to the ſouls of men: it will follow that if the ſouls of brutes ſuper-exiſt the diſſolution of their bodies, they muſt be active and percipient as much as the ſouls of men are. I might anſwer to this firſt, as in the laſt paragraph of that ſecond ſection, to a like objection; that though this ſhould follow, it would not, certainly, infer that the human ſoul is unactive and impercipient after death: but rather conclude the contrary more ſtrongly. But in this caſe that is always ſuppoſed an objection, which in effect proves none. It is like raiſing a terror, which when the firſt ſurprize is over, appears to be without foundation. Men who hold the immateriality of the ſoul, need not be embarraſſed (as it is ſaid they are) how to diſpoſe of the immaterial ſouls of brutes, or be concerned what powers they may have after the diſſolution of their bodies; but leave all to the Being who made them. But ſecondly we may obſerve, how far the argument in this ſection is not applicable to the ſouls of brutes. It is to be obſerved that the activity of the human ſoul is of *two kinds*; that which is exerted in moving the limbs ſpontaneouſly; and that power whereby we turn back our perceptive capacity to our paſt perceptions, or bring them in view again, ſo as to compare them together. The perceptivity of it is alſo twofold; for it is percipient of the action of matter upon itſelf, and percipient of its own internal operations in thinking. See ſect. 1. N° 1. The laſt kind of activity, and the perceptivity reſulting from it, is much more noble, more indefinent, and indefeaſible, than the firſt. Now, though brutes have the firſt of theſe powers in common with men, and the perceptivity belonging to it; yet they want altogether the ſecond, and therefore the perceptivity reſulting from it: for it is in that power alone that the rational nature conſiſts; ſince we are neither rational nor free in any other reſpect. In the diſcovery of truth, and all the acquiſitions of knowledge we make, we are active only in bringing together and methodizing our ideas by this power; and we as neceſſarily ſee their agreement, diverſity, or ſeveral relations, as we ſee external objects with our eyes, when open; all which ſhall be made appear in due time. And in this ſection the activity reaſoned from, inſiſted upon, and which forces the concluſion, is this *ſecond ſort*. As I ſaid, it is more indefinent, and more extenſive. The activity

activity of the ſoul whereby it moves matter, and is percipient of the manner how that affects it, is ſoon impeded: but the other ſort is often not the leſs vigorous. When a man lies down fatigued, he can ſtill think with pleaſure on many ſubjects; his reflexion travels over the globe, turns back to paſt ages, and dives into futurity. And when the body is quite wearied out, conſciouſneſs and perceptivity do not leave the ſoul. Since therefore the conſciouſneſs and activity reaſoned from here, in the ſeveral inſtances, is *our own* as we feel it within, and ariſing from the rational power of the ſoul; the concluſion will not be applicable to the immaterial part of brutes. They want this power and perceptivity in a ſtate of union; therefore we could not have argued for it in a ſtate of ſeparation: the argument of the two powerleſs ſubſtances would never bear us out. The power muſt appear in the union, that we may be ſure it belongs to one of them in ſeparation, ſince it could not be produced by ſimply uniting together two things void of ſuch power. And when neither part hath the power in the ſtate of union, as is the caſe of the two ſubſtances in the brute nature, this reaſon cannot infer it when they are ſeparated; whereas the objection ſuppoſes it does. They who run the parallel between the human ſoul and that of brutes, ſuppoſe ſtill the ſame powers in both; but ſurely rationality muſt be founded in ſome power, which the brute ſoul, as ſuch, has not. This argument therefore doth not prove the activity of the brute ſoul when ſeparated: though if any one could prove it, he would do no diſſervice perhaps to philoſophy (*b*).

(*b*) If the brute ſoul ſuper-exiſt the diſſolution of the body, we cannot conceive it without the perceptive capacity, as to external objects; and that in a greater degree than when confined to it; but even here it is inferior to the human ſoul. It is not percipient of harmony in ſound; of proportion or beauty in figure or colour; of order in ſucceſſion, *&c.* It ſeems rather percipient of the ſimple exiſtence of things, than of their manner, order, *&c.* of exiſtence. As alſo, if it ſuper-exiſt; it is eaſier to conceive that it muſt have ſome kind of activity, than to determine what that is; for though it hath the power of moving the body, it hath then no occaſion to exerciſe that power. And in this reſpect alſo it is much inferior to the human ſoul; though that doth not impreſs a greater motive force on the matter of the body, yet it impreſſes it in conſequence of reflection, and therefore on a thouſand different occaſions, in which the brute-ſoul is unconcerned. It ſeems rather to move the body in conſequence of ſenſation, or of being firſt acted upon, and hath not ſo much the principle of action in itſelf. But all this will be better underſtood hereafter.

SECT.

SECT. V.

The ſeveral arguments againſt the immateriality of the ſoul, urged by Lucretius *and others, examined, and ſhewn fallacious, as applying the equivocal ſymptoms of a diſordered organ in a ſtate of union to the ſoul itſelf.*

ACcording to the method propoſed, the objections againſt the immateriality of the ſoul are next to be conſidered. Theſe have been all muſtered up (or the greateſt part of them at leaſt) by *Lucretius* near eighteen hundred years ago; ſo that now they are become common topicks, and a kind of *claſſical arguments*; and as they fall in with our prejudices, they are eaſily underſtood, and therefore in every body's mouth. The wit and elegance of this author, and the charms of his numbers, recommend theſe objections particularly to thoſe who admire politeneſs in writing, more than *accuracy in thinking*. Hence they have all the advantages of becoming popular and gaining ground. Now, though the truths evinced in the preceding ſections render any difficulties of this kind not very formidable; yet theſe conſiderations make it neceſſary to apply the principles laid down above to the diſcuſſing our particular prejudices, and the arguments that have been raiſed from them. Some men perhaps cannot take this pains for themſelves; and the greateſt part have their thoughts taken up about quite different matters: and yet both theſe ſorts of perſons might be willing to take a review of this ſubject, if things were ſet in right order before them. The Sceptic's whole art in this affair has been to apply ambiguous appearances to his own ſide of the queſtion. By ambiguous appearances I mean, *thoſe phænomena in a ſtate of union, which ſeem at firſt ſight to infer the materiality of the ſoul; but upon a nearer view are found to be very conſiſtent with its immateriality.* The ſymptoms and diſorders of the body, which the ſoul muſt be ſenſible of in a ſtate of union; *becauſe the ſoul muſt be ſenſible of them*, have been artfully given out for the ſymptoms and diſorders of the ſoul itſelf: where

where it is obvious at firſt view that, if once we allow the body to be liable to diſorders, as moſt certainly it is, things could not have been otherwiſe, let the ſoul be ever ſo much *a pure ſpiritual ſubſtance*. And it will farther appear, as we go on, that even ſome of thoſe *ambiguous appearances* which have been brought to prove the materiality of the ſoul, afford a ſtrong and clear proof of the contrary. However, that all objections may be taken off with more advantage and clearneſs, I beg leave to lay down the following principle, and to mark particularly the *ſtrength* and *extent of it*; and this the rather, as it ſeems to be forgot by the generality of ſceptical Writers; though it is as old as reaſon itſelf, an eternal truth, and leaves no room for doubting: but theſe men very deliberately admit into their reaſonings that a contradiction may be poſſible; and think an objection not the leſs ſtrong, though it proceeds on this ſuppoſition. The principle is this:

II. It is impoſſible the effect ſhould be perfecter than its cauſe, either in *kind*, or in *degree*. For if the effect were perfecter in *degree* than the cauſe of it, all that degree, or exceſs of perfection in the effect, which is not in the cauſe, would be really uncauſed; or it would be a perfection effected, without being effected by any thing: that is, effected and not effected: And if the effect were perfecter in *kind* than the cauſe that produced it, or contained, not only a greater degree of the ſame kind of perfection, but quite another and ſuperior kind; then that whole *ſpecies* of perfection, and not any degree of it only, would be uncauſed, or the effect of nothing; which is yet a greater contradiction than the former. Any one will find, by purſuing this in his own mind, that if it could be true, nothing could be falſe, nor nothing impoſſible. No man could aſſert a thing, which another could not as juſtly deny. If the cauſe could communicate to the effect what it had not in itſelf, then any cauſe might bring to paſs any effect, be the diſproportion between them ever ſo great; nor could limits be ſet, where this giving away what it had not, or doing what it could not, would end. And at laſt, all would end in this; that in reality no cauſe was neceſſary to produce any effect: for one part of the effect might as well exiſt without a cauſe, as another. And then I ſuppoſe it would be needleſs to philoſophize farther about any thing. If it were poſſible that any one truth could *fall*, or be *not-truth*; no other truth could be truſted to: but rather all truth would fall with it; becauſe all truth proceeds equally from the ſame eternal Reaſon or Mind, and is

equally neceſſary in it. And the final reſult of all would be, the denying this eternal Mind itſelf: and then indeed an endleſs night of darkneſs would cover the underſtanding, and the difference between truth and falſhood ceaſe for ever. For as eternal Truth leads to an *eternal Mind*, where it was eternally known, and ſubſiſted: ſo, ſuppoſing that away, the reaſon of things fails. And what man can endure to think of a *neceſſary abſence of reaſon in nature*, an univerſal defect of truth! Yet this abhorred confuſion doth the taking away the above principle lead us directly to. The Sceptic could not then have a reaſon for denying. *Denying ſuppoſes truth*; ſome certain principle: and therefore an *eternal Reaſon*. So inconſiſtent is he with himſelf! to be conſiſtent, he ſhould be for ever ſilent. His very objections ſuppoſe the exiſtence of that eternal Reaſon, that *adorable infinite Mind*, the non-exiſtence of which he would prove by them *(a)*.

III. Now as all truth is conſiſtent with itſelf, and as the denying this principle leads to downright Atheiſm; ſo we may obſerve by the by,

(a) It will be in vain to object againſt the principle here eſtabliſhed, That ſometimes an Artiſt may make a piece of work, ſurpaſſing his own ſkill and idea; for it is plain that, truly ſpeaking, this is impoſſible. Though his work ſhould ſurpaſs his art, it cannot be ſaid that he makes it ſurpaſs it: he muſt then have art to do the thing which he had not art to do. A lucky hit, though commonly called chance, is really a concurrence of ſome cauſe, or cauſes, unknown to the Artiſt; and this indeed may give his work a degree of perfection, which he did not deſign, or could not deſign; but then this exceſs of perfection in his work above his art, is as much the effect of theſe *concurring cauſes*, as the perfection of it below that exceſs, was the effect of his art. In a word, ſtrip this objection of every concurring cauſe, and it becomes a direct contradiction: take in concurring cauſes, and it becomes no objection. The miſtake is; we aſcribe a part of the effect to the wrong cauſe, and thence to no cauſe at all: "The man produced the effect; he did not, or could not, deſign it all; therefore "what exiſts more than he deſigned, is produced by nothing." This is falſe logic. The effect ſometimes falls ſhort of the deſign (as it were a man ſhooting at a mark); there is a reaſon for this: ſometimes it goes beyond it; there is a reaſon for this. Nothing can be, for which there is no reaſon, and of which there is no cauſe. We take our aims; but are not infallible in the direction of ſpontaneous motion by the act of the will. I have ſhewn we do no more. The reſt is committed to another agency (N° 24. ſect. 2) and performed by a ſteady, unerring courſe of nature (ſee the Note *(z)* N° 35. ſect. 2.) and every thing comes out regular, and in proportion to its cauſes. Though the effect doth not anſwer our deſign, to which our conduct was diſproportionate; it anſwers to nature's ſteady laws. All this will be applicable to the objection of the painter and his colours. Where free cauſes intervene to diſturb the effect, there is no objection, or diſpute.

that

that *(vice versâ)* from the force of this principle it appears an expreſs contradiction to aſſert, that there is no other cauſe but dead matter in the world. For ſuppoſing it ſome way to have got exiſtence, and not examining how it could be moved; if once there had been nothing but matter, any way moved, no effect could have been produced, nor no perfection exiſted, beyond what is in dead matter; nor active power ever have been exerted: and from this again the neceſſity of an immaterial Being, the cauſe of the material Univerſe, is obvious. But not to inſiſt on other things, what concerns the preſent purpoſe is; it follows from this principle, that it is *abſolutely impoſſible* the mechaniſm of the body, or mechanical motion, howſoever excited, ſhould be the cauſe of life and ſpontaneity, as it appears in the meaneſt reptile: and the impoſſibility is extremely heightened, if we aſcend up to the nobler activity and perception that is in the ſoul of man. For matter then by being *moved*, muſt acquire a power of moving itſelf; from being *inert* and *paſſive*, it muſt become an agent; from being *neceſſary*, it muſt riſe to the perfection of freedom; from being *dead*, and without all ſenſe, it muſt begin to be percipient and conſcious; to imagine, reaſon, diſtinguiſh, form abſtract notions; to be wiſe, prudent, moral, *&c.* which are all perfections, not only ſurpaſſing mechaniſm and mechanical motion in degree; but infinitely excelling it in kind. This is a notion ſo groſly abſurd and unphiloſophical, that whoever conſiders it ſeriouſly, would be tempted to think, he is combating a creature of his own imagination; and that ſurely no man was ever fooliſh enough to affirm it: yet it is what the *Epicurean* Atheiſts directly aſſert *(b)*; what all ſorts of Atheiſts muſt neceſſarily ſuppoſe;

(b) I have before obſerved that *Lucretius* aſcribes all productions and effects to chance.

Nam certè neque conſilio primordia rerum
Ordine ſe quæque, atque ſagaci mente locârunt, &c.
Lib. 1. ver. 1020.

Compare this with what he ſays, lib. 2. from ver. 864. to ver. 990. where having ſpoke of equivocal generation, and the change of matter in the bodies of animals, he adds,

Jámne vides igitur, magni primordia rérum
Referre in quali ſint ordine quæque locata,
Et commiſta quibus dent motus, accipiántque?
Ver. 882.
Illud in his igitur fœdus meminiſſe decebit;
Non ex omnibus omnino, quæcunque creant res
Senſilia extemplo, & ſenſus me dicere gigni:
Sed magni referre, ea primum quantula conſtent,

ſuppoſe ; and what the preſent Sceptic would ſtill maintain, if poſſible, under ſome diſguiſe or other. If this could be ; all that is ſaid in the laſt paragraph would follow : we could never be wrong in affirming any thing of any thing : perception, ſpontaneous motion, reaſon itſelf and virtue, would be perfections effected in matter, preciſely by nothing, by no cauſe at all ; for the cauſe aſſigned is as void of theſe perfections, as no cauſe, or the negation of all cauſe is.

IV. As

Senſile quæ faciunt, & quâ ſint prædita formâ,
Motibus, ordinibus, poſituris denique quæ ſint :
Quarum nil rerum in lignis glebiſque videmus.
Et tamen hæc cùm ſunt quaſi putrefacta per imbreis
Vermiculos pariunt ; quia corpora materiai
Antiquis ex ordinibus per mota novâ re,
Conciliantur ita, ut debent animalia gigni.

Ver. 890.

This is a ſtrange piece of reaſoning. No man can read it without ſeeing the abſurdity of it. The Sceptick pretends to be ſhocked with the credulity and ignorance of the world. From this one would imagine that nothing could be advanced by him, but what was highly reaſonable, and evident in itſelf ; yet no man has a greater ſhare of this credulity, nor ſays ſuch ſhocking things. *A bit of wood, for inſtance, may become a living Being : a particle of matter if placed on this ſide produces nothing ; but if placed on the other ſide, it has life and motion : knowledge and reaſon are only the reſult of a different order or ſituation of theſe dead atoms.* If his Adverſaries ſpoke thus, they would juſtly deſerve that ridicule and contempt with which he treats them. The reaſon why *Lucretius* advanced all this, was (as he ſays) to free men from ſuperſtition and error ; and the like things are ſtill maintained under the ſame pretence ; but it would be better, if the Sceptick (according to the character he firſt ſets out with) would broach no hypotheſis of his own ; if he would content himſelf with pointing out to other men wherein they are wrong and ſhewing the weak ſides of the arguments they adduce. Truth would thus be no loſer ; men would either reconcile difficulties, or relinquiſh the principles whoſe conſequences were evidently abſurd. But when it appears he hath other views, an itch to maintain ſomething of his own ; his pretences, though ſpecious, become ſuſpected. And yet it was always thus ; we never had a diſintereſted *Examiner* of other men's notions. The *Academick* himſelf will not keep within his own province ; he has a favourite ſcheme, contrary to the neutrality he promiſes to obſerve. When a *Sceptick* turns *dogmatiſt* in favour of his own hypotheſis, nothing can be more out of character : and yet I am apt to think, no man ever ſet up to be a *cool Doubter* but with the view of being a *warm Zealot*. This is an artful way to prepoſſeſs the minds of men : an *Enemy* to credulity and vulgar ſchemes is always ſuppoſed to have a ſecret fund of better knowledge. But let the paſſage I have juſt now quoted bear witneſs, how we are reſcued from ſuperſtition and popular errors. Let me ſeriouſly aſk, Is ſuperſtition overcome by believing contradictions ? On the contrary, if once we admit theſe, we are then fit to receive any creed in philoſophy.

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IV. As to the diſguiſes, under which ſceptical men would ſtill ſupport this notion; however they may ſeem at firſt view to perplex the point; yet they leave the aſſertors at laſt under a neceſſity of maintaining the ſame undiſguiſed abſurdities, and of undertaking the defence of all the contradictions juſt now mentioned, in N° 2. For either they muſt ſay, that all and every part of matter is free, thinks, reaſons; which is ſhewn before (Sect. 3. N° 8.) from the endleſs diviſibility of it, to be monſtrouſly abſurd (*c*); as every one is conſcious from his own experience; and which therefore the *Epicureans* durſt not aſſert; but ſtrongly maintained the contrary (*d*). Or elſe they muſt ſay, that the bare putting together atoms dead and ſenſeleſs, is the only cauſe why the compound be-

We may go farther and obſerve, whatever the *Pyrrhoniſt*, *Sceptick*, or *Academick*, may pretend, the ſolicitous mind of man hates to be in ſuſpenſe, and will believe ſomething, or frame ſomething to be believed. A certain great Author banters us for *taking party*, and compares us to drowning men, who catch at any thing to keep themſelves above water: and yet the ſame perſon frames a party, and *takes it*, to keep himſelf from being ſwallowed up in the depth of bottomleſs doubting; he tells us that there are Enthuſiaſts on all ſides, and Mr. *Bayle* has obſerved that there have been Martyrs for infidelity. So impoſſible is it to believe nothing; or not to believe ſomething with vehemence! Now, ſince it is certain that the rational mind (*as ſuch*) hates to remain in ſuſpenſe, and goes into ſome concluſion or other; this conſequence plainly follows, *That we ſhould be as cautious in doubting as in dogmatizing:* It is eaſy to hoiſt our ſails, but uncertain whither the winds and waves may carry us. The direct contrary of this concluſion hath been admitted in all ages: Every man ſuppoſes himſelf qualified to be a *Doubter*; want of attention will make us think ſo; but the queſtion ſhould be conſidered, how we are to ſteer next? for, as I have ſaid, we will *take party*, and go into ſome concluſion or other. Without this caution errors will be multiplied inſtead of being corrected; and it is to this want of being qualified to doubt aright, that the ſeveral denominations of Atheiſm are owing. There is but one way by which the veſſel can enter the port again; but a thouſand ways ſhe may miſcarry in the wide ocean. Contradictions, like rocks and ſhelves, are eaſily ſtumbled on. *Epicurus* ſtumbled on chance and atoms; *Strato* on matter and gravity: *Ariſtotle* himſelf on an eternal and neceſſary viciſſitude of things; that is, as I take it, a *changing neceſſity*. It had been better to have kept to his Maſter's doctrine. From all this it appears That it is not ſo eaſy to doubt as is generally imagined; and that there never was any ſuch thing as an Unbeliever: theſe cool men have their different creeds, ſo much the more ſhocking as they are leſs common.

(*c*) No matter can be one thinking ſubſtance; becauſe, as Dr. *Clarke* obſerves, no matter is one ſubſtance, but a heap of ſubſtances.

(*d*) *Lucretius* ſays, in the place laſt cited, at ver. 864.

Nunc ea, quæ ſentire videmus cunque neceſſe eſt
Ex inſenſilibus tamen omnia conſiteare
Principiis conſtare:——

comes endued with all the powers of a human ſoul; which is really to return to the *Epicurean* ſcheme, and to be preſſed with all the nonſenſical contradictions above. It is the very ſame thing to aſſert, that the repetition of the negation of cauſe multiplied ſo many times, becomes a cauſe. This contradiction is not leſſened by taking in figure, poſition, motion; ſince the compounding atoms are ſtill dead and ſenſeleſs, by ſuppoſition, and by neceſſity. *Lucretius* took in all theſe, long before the modern Sceptic thought of them (*e*). Nay farther, this contradiction is not leſſened, by ſaying infinite Power puts the dead parts together, or moves them thus mechanically. This is but borrowing the authority of a word, to make a contradiction paſs. It is the ſame thing as ſaying, infinite Power may bring a thing to paſs, without applying power or efficiency, to produce it. Infinity of Power doth not exclude reaſon; it is infinitely reaſonable, and therefore cannot be a refuge for a contra-

(*e*) *Sed magni referre, ea primùm quantula conſtant*
Senſile quæ faciunt, & quâ ſint prædita formâ,
Motibus, ordinibus, poſituris denique quæ ſint: ———

It will be urged here, that often we ſee a material compound have properties, that are not to be found in the parts of it: as it may have a ſpherical, cubical, &c. figure, which the parts have not. To this it is anſwered, though the parts may not have the ſame figure with the whole, they muſt have ſome figure; and ſo in other things. From this it would follow only, that though the parts may not have the ſame thought, perception, or volition with the whole; yet they muſt neceſſarily have *ſome thought*; and this is not only granted, but proved above (Sect. 3. N° 8.). Here let me mark the diſingenuity or the ignorance of Dr. *Clarke*'s *anonymous Adverſary*. He ſays a clock *hath power to tell the hours*, which none of the parts ſeparately have. It was ſhewn (Sect. 2. N° 14 and 15) when ſpeaking of machines and mechanical motion, that the figure, order, poſition of parts, or any other poſſible quality matter can be endued with, would not ſimply make the clock move any how, without the immaterial power of *gravity* conſtantly acting. Where is the argument from this for the materiality of ſouls? And all that is effected is, that the index is regularly moved, by this uniform action of gravity, impreſſed partly on the *poiſe*, and partly on the *pendulum*; which ſure is no power in the clock. It is a power from without, impreſſed on dead matter, and communicated by *reſiſtance*, to other dead matter. This is no power in the machine; for it hath no power to do otherwiſe. This is that very particular in mechaniſm, and inſeparable from it, that deſtroys the Sceptick's ſcheme. As to telling the hours, all that is in this *equivocal expreſſion* is, that by this mechanical motion time is, in ſome manner meaſured to us. But doth the *ſyſtem of wheels*, by its own power and ſkill tell the hours? That is the idea deſigned to be conveyed under an ambiguous expreſſion. The Author might, by the ſame philoſophy, have aſſured us, that the earth *hath a power* of making night and day, and of placing the ſun in all the ſigns. Theſe, in ſhort, are ſuch powers as conſiſt in paſſivity only; that is, powers that *are not powers*.

diction.

diction. But this is all the use the Sceptic makes of it: after it hath served his end in such absurdities; infinite Power is but a word, like other things, and the infinitely powerful Being nothing. Lastly, let us observe, that it is perfectly absurd to say infinite Power may superadd a property to a substance incapable of receiving it, (N° 14, 15, and 26. Sect. 1.) that is, incapable of being the subject of it. The substance being first divisible, and then the parts of it still remaining dead; the property can have no subject of inhesion but the junction of dead parts to dead parts (*f*). But, as hath been said before, that the junction, putting together, or cohesion of dead particles, itself a property, should be the subject of another property, is an absurdity Mr. *Locke* himself hath sufficiently exposed. Whence it is plain, whatever artifice or shift men may use of in affirming the materiality of the soul, they will always be liable to the contradictions shewn above: and from the principle there laid down, all the objections against its being immaterial, drawn from the symptoms of mechanism, and mechanical motion in the body, lose their force at once; without recurring to what was said N° 13. Sect. 2. which cuts them off upon other accounts. However, we shall go on to particularize them.

V. The first difficulty men pretend to have in allowing the soul to be material, is what hath been accidentally mentioned elsewhere (Sect. 2. N° 32.) *viz.* that they cannot conceive *when*, or *how*, immaterial substance could be joined to matter in the bodies of men, beasts and insects. But to shew the weakness of this objection, we need only consider what hath been already proved to be done even with regard to the bodies of animals, and by whose power. The bodies of all animals, man's not excepted, are brought up from things of imperceptible magnitude, through various stages, under different forms, and with different methods of œconomy; so that often the body of the same creature seems as dif-

(*f*) The necessity of what is here asserted will appear thus. Suppose the *thinking compound*, or *whole*, divided into two halves (as all matter is divisible); if both these think, divide them again, &c. If all the parts *still think*, all matter is a thinking substance; and what multiplicity of consciousness must there be in a material soul! Or if we stop at any division, the last thinking *whole*, resolved by division into unthinking parts, had nothing but the *junction*, or adding together of these parts, to be the *support* of the superadded property, of thought, reason, &c. which, notwithstanding of the word *Omnipotence* inserted, is as contradictory, as any other way of asserting the materiality of thinking Beings.

ferent

ferent from itſelf, as from that almoſt of any other (*g*); and all this by the conſtant intervention, and real action, of infinite Power exerted. The inexpreſſibly fine mechaniſm is the work of Almighty Wiſdom; the mechanical motions are his impreſſions; and thus ſpontaneous motion itſelf is effected. How can we think then, when his Power is preſent in forming and moulding their bodies, and ready to be ſubſervient to their ſpontaneous motions, *that he ſhould forget to add the ſpontaneous principle, or that there ſhould be difficulty in it.* This is the chief part of the work, and principally intended. We could ſcarce conceive even of a man, when he forms the parts of any machine, that he ſhould forget the power which all the reſt ſuppoſe, and for which they are deſigned. The Power of the Creator is inceſſantly exerted upon all the inaminate parts of the creation; and muſt it not be greater in proportion, when exerted upon the living and rational part of his works? And then how high will that proportion riſe? It ſhall be ſhewn, or rather it is ſelf-evident, that the wide extended Univerſe, though ſtretched beyond the bounds of imagination, with all the wonders of wiſdom, and power in it, is ſolely deſigned for the ſake of *intelligent Beings*, to train them up for a rational eternity. Theſe are the proper *Eleves* (or pupils, if I might ſo ſay) of a Being himſelf infinitely rational. His care therefore about theſe, either in uniting them to, or diſengaging them from matter, and in all other reſpects, muſt (if I may venture ſo to ſpeak) be the principal part of his work, his ultimate view. *Lucretius* ſays, *Eſſe animas præſto deridiculum eſſe videtur.* But what is there ridiculous in it, except thinking as he did that they were *ready* by chance. This indeed is abſurd enough, but the abſurdity is of his own making.

VI. The next argument for materiality is, That we ſee the ſoul *generated* with the body, *grow* with the body, and at laſt *decay* with the body; at firſt tender and weak, then robuſt, and in the end feeble and worn (*b*). I obſerved before, when ſpeaking of ſpontaneous motion, (Sect.

(*g*) The body of the common frog goes through eight or ten different ſhapes, before it is perfected; not to mention the transformation of inſects, ſome of which firſt *creep*, then *ſwim*, and at laſt *fly*: and the microſcope ſhews us that nature is uniform and conſonant to herſelf in the formation of all animals, which are very different in their *firſt ſtamina*, from what they are in their laſt perfection.

(*b*) *Præterea, gigni pariter cum corpore; & unà*
Creſcere ſentimus; paritérque ſeneſcere mentem.

Nam

(Sect. 2. N° 18.) that the reaſon of the imperfection of it in infants, wounded men, decrepit old people, and generally all thoſe who labour under any kind of infirmity or diſeaſe, is the ineptitude of the inſtruments and apparatus of motion; that all on the part of the *will* is equally diſpoſed then as at other times; that the common ſenſe of mankind doth not allow, or imagine it poſſible, that diſeaſe or age ſhould affect the will, or weaken the intenſity of our deſires; and that we are ſubject to no decays or depredations of time in reſpect of that which is the proper activity and power of the ſoul. But the *Epicurean* hath palmed upon us the accidents of the body, as belonging to the ſoul itſelf; becauſe by the law of their *preſent union*, it is forced to ſympathize with them. It was while he looked upon his *arms* that *Milo* wept, and cried; *At hi quidem jam mortui ſunt.* He did not lament the decay of his ſoul, but his muſcles ſhrunk up, and ſinews unſtrung. It is the body of the elephant, that ſupports the turret and fighting men. Let us ſuppoſe, as a poſſible conjecture only, that the body hath an *immaterial mover*, which is obliged to move it, by the inſtrumentality of organs, and the laws of mechaniſm; and all theſe appearances become *equally neceſſary*, as on the ſuppoſition of *Lucretius*'s *material movers:* which ſhews us how *equivocal* theſe appearances are; and how *ſophiſtical* it is to build a concluſion upon them. But when we call to mind the principle laid down in N° 2. and the reaſoning upon it N° 3. (That it is impoſſible matter, by being moved, ſhould arrive to the power of moving itſelf, *&c.*) that which was only a poſſible conjecture, becomes abſolutely certain; and the ſceptical concluſion demonſtratively falſe. Farther; let us put the Sceptic in mind here, that though there is a nobler ſpecies of activity in the human ſoul,

Nam velut infirmo pueri, teneróque vagantur
Corpore; ſic animi ſequitur ſententia tenuis.
Indè ubi robuſtis adolevit viribus ætas;
Conſilium quoque majus, & auctior eſt animi vis.
Poſt, ubi jam validis quaſſatu' ſt viribus ævi
Corpus, & obtuſis ceciderunt viribus artus,
Claudicat ingenium; delirat linguáque mènſque;
Omnia deficiunt; atque uno tempore deſunt.
Ergo diſſolvi, &c.

Lib. 3. ver. 446.

How abſurd is it here to pretend that the ſame *feebleneſs* is in the intenſity of childrens deſires, as in the *limbs* of their bodies, contrary to all experience!

than moving the body ; yet ſince that can no way appear, but by ſome motion of the body ; and ſince all bodily motion is performed mechanically, even by *Lucretius*'s *robuſt ſoul:* if the mechaniſm of the body is quite diſordered, the power of the ſoul muſt be quite hid to us, who can ſee but with bodily eyes ; while the active Being itſelf remains untouched in its nature. Therefore he concludes wrong from the former premiſes, when he ſays,

Ergo diſſolvi quoque convenit omnem animaï
Naturam ; ceu fumus in altas aëris auras.

VII. As to what is ſaid in this objection of the *generation* and *vegetation* of ſouls ; it is contradictory that any ſubſtance, whether material, or immaterial, can be generated (Sect. 2. N° 32.) ; and contradictory that immaterial ſubſtance ſhould vegetate : vegetation is performed by the addition of dead parts. The human ſoul is indeed at firſt without knowledge, and without experience ; but hath the power of attaining both. Why ſhould it be endued with the *power*, and prevented in the *exerciſe* of it, by receiving its knowledge inſtantaneouſly ? Have the power to acquire a thing ; and receive it without the help of that power ? This is the very particular that diſtinguiſhes it from the irrational ſoul of brutes. They are incapable of improvement ; finiſhed in their ſpecific perfections all at once. Not having this power, they have no novitiate to go through ; nor is improvement expected from them. It is true, it was neceſſary that the *firſt individuals* of mankind ſhould be furniſhed extraordinarily with knowledge, or experience at leaſt. *The firſt inſtitution of things is always neceſſarily different from the law of their future procedure.* This is ſo with reſpect to the very body : with reſpect to every thing, if ever there was a *creation*, rather than an *eternal ſeries* of dependent and effected cauſes. But it would have been *even* unreaſonable that it ſhould be thus, after the inſtitution was ſettled. Our improvement muſt be by our own induſtry, a part of our *probation* as rational, having received the power, and being forced upon the firſt exerciſe of it by the neceſſities of the body. Of all which hereafter. It was wiſely ordered, agreeably to this, that the body ſhould be long weak, (longer weak than that of any other animal) till experience was attained, and the foundations of knowledge laid. It had been eaſy to have entered us upon the world, with the ſame perfection of knowledge and reaſon, that we have when

we go out of it; or much greater: but I beg it may be conſidered, that habits are to be acquired by the terms; and therefore habits of virtue. Such a notion as *infuſed virtue* is inconſiſtent. *Improvement muſt be our own act*; our firſt trial therefore was to be in our firſt beginnings; and, naturally ſpeaking, I may ſay our only trial; if we conſider how eaſily the mind, once inflamed with the love of reaſon and virtue, is carried on. How abſurdly is it in every body's mouth, *That nature is a ſtep-mother to man only of all living creatures*; when the *Author* of nature proceeds in the moſt rational courſe with rational Beings! Every thing is beſt as he hath ordered it; if we would judge according to the nature of things, and not by the meaſure of our own prejudices.

VIII. The inſinuation of the ſoul's wearing away and decaying with the body, is a *wilful miſtake*; there are ſuch inſtances of the contrary, as cannot leave a man ignorant, that the decay is all on one ſide (*i*). People of ſober and temperate lives preſerve a *clearneſs* of judgment, and *vigour* of mind, to the laſt: though this cannot be ſaid indeed of *luxury and conſtant debauches*, which firſt attack the ſprings of mechanical motion, and diſguiſe the activity of the ſoul, long before it leaves the

(*i*) See *Cicero* of old age. The inſtance of *Ap. Claudius* is remarkable. He was blind with age, and not able to walk——But I refer to his ſpeech in *Plutarch*'s life of *Pyrrhus* [Πρότερον μὲν (ἔφη) τὸ πεῖ τὰ ὄμματα τύχῳ ἀνιαρῶς ἔφερον, ὦ Ρωμαῖοι· κ. τ. λ.] And of *Pyrrhus* himſelf, when he was ſhipwrecked on the coaſt of the *Meſſapii*, he ſays, The ſtorm threw him aſhore τῷ μὲν σώματι παντάπασιν ἀδυνάτως ἔχοντα, τόλμῃ δὲ καὶ ῥώμῃ τῆς ψυχῆς ἀνταίροντα πρὸς τὸ ἀποβῆναι. I ſhall not ſpeak of *Maſiniſſa*, nor compare with him *Aurenge-zebe* in latter times; but deſire any one to conſider the account which the *Abbé de Vertot* gives of the King of *Maroc*, and the different circumſtances of his *body* and *mind*, the very laſt day of his life, in which he gained the battle of *Alcacer*. (*Revolutions of* Portugal, p. 19.) *Il ſi voyoit mourir lui-même & ſa foibleſſe étoit ſi grande, qu'il ne douta point, qu'il ne fût arrivé à ſon dernier jour, il n'oublia rien dans cette extremitè pour le rendre le plus beau de ſa vie. Il rangea lui-même ſon armée en bataille, & donna tous les ordres avec autant de netteté d'eſprit & d'application, que s'il eût été en parfaite ſanté. Il étendit même ſa prévoyance juſqu' aux évènemens qui pouvoient arriver par ſa mort, & il ordonna aux Officiers dont il étoit environné, que s'il expiroit pendant la chaleur du combat, on en cachât avec ſoin la nouvelle, & que pour entretinir la confiance des ſoldats, on feignît de venir prendre ſes ordres, & que les Aides de camp s'approchaſſent a l'ordinaire de ſa litiére, comme s'il eût été encore en vie.*—— I ſhall not tranſcribe more, but the whole paſſage deſerves to be read. Such inſtances as theſe ſufficiently take off the calumny in the objection.

body (*k*). It is remarkable, that the great Philoſophers of antiquity were men of long lives, who wrote and taught till extreme age. For this purpoſe I might quote all *Tully*'s Book *de Senectute*. How well doth *Cato* rectify our prejudices (*l*)! A virtuous old age, ſuch as the *Cenſor himſelf* deſcribes it, is the loveliеſt ſpectacle in human things. The virtuous old man has attained what all men deſire (*m*); and in the way that all men ſhould deſire it: he is paſt the ſhelves and dangers of life (*n*), which the young muſt encounter (*fatally perhaps*); he rides ſecurely in the port (*o*); and ſhall, inſtead of being extinguiſhed for ever, be ſafely landed in a new country; unleſs we can ſuppoſe that rational Beings are to be abandoned at laſt, by a Being himſelf infinitely rational: which if we could affirm, there is nothing that we might not deny. In ſhort, a philoſophical youth makes a comfortable old age (*p*). And then we are on the *confines* of the *kingdom of reaſon*; ready, and (by going through this laſt and beſt part of our life) in ſome meaſure prepared, to enter into the ſociety of its inhabitants (*q*). And if this be a rational expectation, there is an end of the Sceptick's objection; for a rational deluſion is a contradiction (*r*).

IX. The next argument brought to prove that the ſoul is nothing but the reſult of the mechanical diſpoſition of the body, is, that in ſome diſtempers of the body it is delirious and mad, and ſpeaks wild things; and that the power of

(*k*) *Libidinoſa enim & intemperans adoleſcentia effœtum corpus tradit ſenectuti.* Cic. de ſenectut. Some, it is true, receive a bad conſtitution from their parents: but hereditary diſtempers are generally owing to miſconduct in their firſt riſe.

(*l*) *A quâ* [*naturâ*] *non veriſimile eſt, cum cæteræ partes ætatis bene deſcriptæ ſunt, extremum actum, tanquam ab inerti poëtâ, eſſe neglectum.* Ibid. If we put down *God* for *Nature* here, no reaſon can be ſtronger, nor any thing more true.

(*m*) *At eſt eò meliore conditione* [*ſenex*] *quàm adoleſcens, cum id quod ſperat ille, hic jam conſecutus eſt. Ille vult diu vivere, hic diu vixit.*

(*n*) *O præclarum munus ætatis, ſi quidem id aufert à nobis, quod eſt in adoleſcentia vitioſiſſimum.*

(*o*) *Quæ mihi quidem tam jucunda eſt, ut quò propius ad mortem accedam, quaſi terram videre videar, aliquandóque in portum ex longâ navigatione eſſe venturus.*

(*p*) *Aptiſſima omnino ſunt, Scipio, & Læli, arma ſenectutis, artes exercitationéſque virtutum: quæ in omni ætate cultæ, cùm multùm diúque vixeris, mirificos afferunt fructus.*

(*q*) *O præclarum diem cum ad illud divinorum animorum concilium, cœtúmque proficiſcar!*

(*r*) Muſt it not appear abſurd to any thinking perſon, to ſay, *Man may contrive ſomething more reaſonable than God hath?* This, in general is contradictory. And in the preſent caſe the contradiction is flagrant, if we ſhould ſay, an infinitely rational Being may fruſtrate his creatures of a rational expectation.

medicine cures it again, as it doth the body (*s*). The modern Sceptick always quotes this with great ſecurity and triumph; but let him ſeriouſly reflect how little it concludes. For ſince by N° 2 and 3, (not to go farther back to other arguments) it is the greateſt contradiction that ſpontaneous motion, in the meaneſt inſect; that the very irrational ſoul in brutes; that words ſpoke ever ſo much at random; that any perception or idea, how wild ſoever, ſhould be the effect of pure mechaniſm: how much a greater impoſſibility is it, that ſuch a noble appearance as *reaſon diſturbed* (for, in reſpect of the brute-nature, even that is an appearance of great dignity) that ſuch a ſuperior appearance, I ſay, ſhould be the reſult of a mechanical diſpoſition of matter! If reaſon diſturbed is the reſult of mechaniſm diſturbed, *reaſon is the reſult of mechaniſm*. Doth not this leave the aſſertion ſtill loaded with all that heap of intolerable abſurdities mentioned in N° 2? Reaſon diſturbed is a complex appearance, implying *reaſon*, and the *diſorder* of that reaſon; or reaſon affected after a certain and particular manner; now, ſince it is certain that the power itſelf muſt belong to an immaterial Being, it is very conceivable that the diſorder, or the particular affection, or the diſturbance in the exerciſe of that power, may proceed from an external cauſe, either material, or immaterial. This I think is a categorical anſwer to this boaſted difficulty. Let us here reſume a little the example of the clock, N° 20. of the laſt ſection; and it is not only reaſonable to argue with the Sceptick from that example, by which he ſeems to inſult over his adverſaries; but remarkable that he may be confuted from it: ſuppoſe it ſhould ſtrike twelve, while the hand points at ſix, and that all the motions in it, how many ſoever they be, ſhould contradict each other, inſtead of agreeing; every body would allow that theſe contradictory motions as much ſtand in need of a power to produce them, as if they agreed. There is indeed no difference in either caſe, as to the motions themſelves: and as to their jarring, we would refer that to ſome accidental impediment, or any thing rather than the want of an *immaterial Power*, ſuch

(*s*) *Quin etiam morbis in corporis avius errat,*
Sæpe animus; dementit enim, deliráque fatur, &c.
Lib. 3. ver. 464. and again ver. 509.
Et quoniam mentem ſanari, corpus ut ægrum,
Cernimus; & flecti medecinâ poſſe videmus:
Id quoque præſagit mortalem vivere mentem, &c.

as gravity or elaſticity. And though we ſaw the motions brought to harmony again, and the diſeaſe (ſo to call it) cured, by rectifying the diſorder of the parts; that could never make us believe that no mover was neceſſary, beſides the mechanical configuration of theſe parts; but confirm us in the contrary, by ſhewing us where the diſorder lay, and how it was cured (*t*). By this we may ſee, in a parallel caſe, how the diſorder of the mechaniſm of matter may diſorder the action, or influence, of an immaterial power upon it (for ſuch the action of gravity or elaſticity hath been ſhewn to be); and therefore plainly enough reconciles any ſuch diſorder, with the immateriality of the ſoul.

X. When this will not turn to account, the modern Sceptick makes another uſe of the preſent difficulty, and contends that at leaſt the perfection of rational thinking depends on the mechaniſm, or right diſpoſition of the matter of the body; "elſe why ſhould an accident, or in- "diſpoſition of the body diſorder our reaſon?" This objection is ſo plauſible, that the generality of men allow it to be matter of fact, and therefore unanſwerable; and yet it is plainly *equivocal*, and hath, like moſt others, a double meaning; one that is conſiſtent enough with the immateriality and rational nature of the ſoul, and another, artfully ſhuffled in under colour of that, inconſiſtent with both theſe. I have juſt before obſerved, *That a thing may be an impediment when wrong, which cannot be an efficient cauſe, though right:* and therefore the real *efficient cauſe*, though it hath in itſelf all the *power* and *art*, muſt depend on this *other thing* for not hindering or obſtructing its operations: and there are abundance of inſtances which ſhew familiarly that the regular exerciſe of a faculty, or power, may be diſturbed by the wrong diſpoſition of an organ or inſtrument; and yet the skill of the *Artiſt* be quite independent of the right diſpoſition of it. Thus a *Muſician* can make but bad harmony, if the inſtrument he plays upon be out of order; nor can the moſt common *Mechanick* exert the perfection of his skill, if the tools he works withal are unfit for his purpoſe. Now to apply this; the ſoul is forced

(*t*) This, and a thouſand other inſtances, ſhew, that a thing may be an impediment, if wrong; which cannot be an efficient cauſe, though ever ſo right: and yet it is plain, in all the Atheiſt's arguments for the materiality of the ſoul, it is taken for granted, that nothing could hinder an effect, but what could produce it. Which any one may apply at his leiſure to them all.

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in this ſtate of union, to have recourſe to a material ſenſory, where the impreſſions of things are firſt made, and ſtill preſerved, as to its *repoſitory* or *diary*, if I may ſo ſay. From all that has been ſaid in the three laſt ſections, and the beginning of this, it appears that the ſoul is as different from this material ſenſory, as a Muſician is from the harpſicord or inſtrument he touches. The ſoul can apply to this repoſitory, examine the nature of what it finds there, chuſe this, reject that, compare things, join them together, reaſon from them, and (ſo to expreſs it) make up muſick and harmony out of them: for all this doth not recede far from the compariſon mentioned. In this the perfection of rational thinking conſiſts, ſince here the power and activity of the ſoul is exerted, and all the art and skill manifeſted. But if theſe impreſſions are *darkened*, as in ſleep; or if they are *diſordered* and *jumbled*, as in many caſualties (which the objection hints at) they may; or if other impreſſions are made, contrary to the order of *external nature*, as in *dreams:* that the ſoul ſhould be percipient of impreſſions, which for the time are not, or not percipient of thoſe which are, is impoſſible; which therefore can be no imputation on its rational nature; for thus far it is barely paſſive. If new impreſſions are made, or the former impreſſions darkened, or not patent; it is only the perceptivity of the ſoul (in which we are *neceſſary* and *paſſive* at all times) which is miſinformed *from without*, and not its rational power or activity, which is perverted *within*. Let it be conſidered, that even the ſenſory, or that part of the brain to which the ſoul is united, is *external* to the ſoul, *i. e.* doth not belong to it as a part of itſelf: and therefore it may have miſrepreſentations made to it, by means of this, and yet not be *touched* or affected in its own nature. I do not ſee, according to this objection, why it ſhould not be made an imputation on the rational nature of the ſoul, that it is at all joined to a material organ. And then the objection is levelled at *ſomething higher* than the ſoul itſelf. What imperfection can it be in a percipient Being, that it is percipient of what is preſented to it? What is it that makes us percipient of the beautiful proſpect of nature in a ſtarry night, or of the pleaſant landſcape round us by day? It is that certain impreſſions are made by the optick nerves on *this ſenſory* we have been ſpeaking of, and which the *percipient* is under a neceſſity of perceiving. And if in a dream, or otherwiſe, different impreſſions ſhould be made on the ſenſory, whereby the face of nature ſhould be repreſented wild and hideous; or if ſounds ſhould be excited full of horror and diſcord; the percipient muſt be equally paſſive in perceiving theſe. Thus

we ſee there is the ſame neceſſity in the nature of the thing, for perceiving theſe impreſſions which are made reproaches on the ſoul, as for perceiving the greateſt beauties of the creation.

XI. Farther, can it be any imputation on the ſoul, that the *regiſter* in the corporeal ſenſory is darkened, or covered up in ſleep? or ſuppoſe this ſhould happen in other caſes? This plainly proceeds from the imperfection of the body. But is it the fault of the ſoul that it is obliged to make uſe of this corporeal regiſter? If there were any fault here; that would be levelled at a *higher cauſe*, as has been ſaid: but there is really no miſtake or blunder in the caſe; but a neceſſity ariſing from the confinement of ſpirit to a dark corporeal priſon: when the confinement is taken off, things muſt be otherwiſe. Now external circumſtances being thus diſpoſed, the regiſter or ſeat of memory is darkened, impreſſions are made on the ſenſory, the ſoul neceſſarily perceives theſe, the perceptions are as real as if the objects really exiſted, the ſoul takes them for real, it acts and behaves as if they were real. This is neither to be delirious nor mad. It would be requiring too much of an *embodied ſpirit* to blame it for being ſubject to illuſions. Let us for once ſuppoſe, that all theſe alterations were made in the ſenſory while we are awake; and then let any one ſay what would be the conſequence. The ſoul would behave in the very ſame way as it does while we are aſleep. There is no man, no not the greateſt Philoſopher, who would not be thus impoſed on. He hath not conſidered the thing aright, who thinks he ſhould be able to ſtand his ground. Laſtly, let us ſuppoſe that ſleep goes off. The animal ſpirits act on the brain as uſual, the regiſter is opened, the late impreſſions effaced, and all is as it was before. Thus the rectifying the organ frees the ſoul from the illuſion to which it was expoſed through the means of that organ. The expreſſion therefore [*mentem ſanari, corpus ut ægrum, cernimus*] is fallacious and equivocal. All this ſeems an intelligible and eaſy account of this matter, becauſe in truth it is fact: and how it may be applied in other caſes ſhall be ſhewn in another place, where this ſubject ſhall be conſidered more at large. In the mean time let me obſerve that, from what has been ſaid it appears unfair, to turn what paſſes in ſleep to a *reproach* on the rational nature. Attentively conſidered it vindicates the ſoul from aſperſion, and may be of farther uſe. The Sceptick, after he hath made a bad uſe of it, would have it remain in that light, and be no more regarded: but that would be wrong. The argument

gument it affords for the ſuper-exiſtence of ſouls, is certainly obvious, and was ſo in all ages. I am apt to think that this *ſingle appearance* (miſunderſtood and miſapplied indeed) gave the firſt riſe to *ſuperſtition* and *Polytheiſm*. *Homer* is led by it to point full at the ſuper-exiſtence of the ſoul. He ſpeaks of it with wonder, and introduces the *proſpect* which it opens, with an Ὦ πόποι, in thoſe remarkable lines which he puts in the mouth of *Achilles* after the death of *Patroclus*:

Ὦ πόποι ἦ ῥά τις ἐστὶ καὶ εἰν Ἀΐδαο δόμοισι
Ψυχὴ καὶ εἴδωλον, ἀτὰρ φρένες οὐκ ἔνι πάμπαν·
Παννυχίη γάρ μοι Πατροκλῆος δειλοῖο
Ψυχὴ ἐφοιτήκει, γοάασά τε, μυρομένη τε,
Καί μοι ἕκας' ἐπέτελλεν· ἔοικέ δὲ θέσκελον αὐτῷ.

Iliad. ψ. ver. 103.

There is no reading this without finding the ſprings of nature touched in us: and the ſevereſt Philoſopher muſt allow the obſervation as juſt in reaſon, as it is natural. But, which is more to my purpoſe, the *cold* and *ſceptical Lucretius* was more afraid of *this appearance*, that it would overturn his whole ſcheme, than of all the phænomena of nature beſide. He foreſaw the difficulty from the beginning, and was on his guard to provide for it. In propoſing the ſeveral *heads* of his work, in his entring on it, his manner of mentioning this is very remarkable.——" Chiefly, (ſays he) " we muſt inveſtigate with ſagacity the nature of the ſoul; " and what it is which occaſions thoſe frightful viſions to us, either *while* " *broad awake*, when ſick, or while buried in ſleep; ſo that we think we " *hear* and *ſee thoſe* before us, whoſe bodies are laid in the earth (*u*)."

(*u*) ——*Tum cum primis ratione ſagaci*
Unde anima, atque animi conſtat natura videndum;
Et quæres nobis vigilantibus obvia mentis
Terrificet, morbo affectis, ſomnóque ſepultis:
Cernere uti videamur eos, audíréque coràm,
Morte obità quorum tellus complectitur oſſa.

Lib. 1. ver. 131.

And elſewhere he gives this reaſon for ſolving the appearance of dreaming by what he calls *ſimulacra*.

——*Ne forte animas Acherunte reamur*
Effugere; aut umbras inter vivos volitare:
Neve aliquid noſtri poſt mortem poſſe relinqui.

Lib. 4. ver. 41.

Accord-

Accordingly, he hath contrived a *long mechanical* ſolution for this phænomenon in his fourth book, in which how he hath ſucceeded we ſhall ſee afterwards. So Mr. *Hobbes* ſeems to have been no leſs apprehenſive of this appearance of dreams to the overthrow of his poſition, *That the ſoul and all ſpirits elſe were material*; which, as hath been obſerved above, he is expreſs in aſſerting: and he owns pretty explicitely, that a great part of the *Pagan Religion* was owing to it. In his chapter of imagination (the ſecond of his *Leviathan*) he ſays, "From this ignorance of how "to diſtinguiſh dreams, and other ſtrong fancies, from *viſion* and *ſenſe*, "did ariſe *the greateſt part of the religion of the Gentiles in time paſt*, who "worſhipped ſatyrs, fawns, nymphs, and the like; and now-a-days the "opinion that rude people have of fairies, ghoſts and goblins; and of "the power of witches, *&c.*" How this Author ſolves the difficulty, we ſhall alſo ſee below: but tho' the chimerical imaginations of weak people are here induſtriouſly jumbled in with this phænomenon, which is *real* and *conſtant*, yet that it *naturally tends* to ſtrike religion into the minds of men, is ſuch a quality, as ſhould provoke our curioſity to ſee what may be in it. Though ſuperſtition be a human weakneſs, yet all religion is not to be accounted bad, as *Lucretius* contends. This conſtant and univerſal appearance was not deſigned to ſtumble men, I dare ſay. Nor was it deſigned for *no end*, nor for a *bad end*; nor is it *the effect of chance*. If in ſleep all had been *an univerſal blank* of conſciouſneſs and action, it would have been very difficult to have perſuaded moſt men, by reaſon alone, that the ſoul retained *theſe powers* in that ſtate: but as things at preſent are, we ſee that the ſoul doth not owe its perception to the body, that it is percipient when that can communicate no action to it, and that ſleep is not an affection of the whole man. (See the note (z) N° 26. of the laſt ſection.) Theſe particulars farther plead an excuſe for endeavouring to find out ſome light, ſome conſiſtent meaning in this perplexed ſubject. (See N° 23. of the laſt.)

XII. From all that is ſaid it appears, that it is no reproach upon the rational ſoul to ſay, That the perfection of rational thinking depends on the matter of the body, as an *impeding* or *obſtructing cauſe:* But that the perfection of rational thinking ſhould depend upon the matter of the body, as a *promoting* or *effecting cauſe* (which is indeed the true meaning intended in the objection) is a direct contradiction. There is certainly a *dependence*; but it is ſuch as I have deſcribed it to be above. Men when they

they turn their thoughts to the limitation and impediment which dead matter naturally gives the ſoul, both in perception and the exerciſe of its rational faculty; and when they obſerve that, the diſorder of the organ being again rectified, the faculties of the ſoul are no farther obſtructed, but rather exerted; Men, I ſay, when they obſerve this difference, and the ſoul's keeping pace, as it were, with the body, ſhould not aſcribe this dependence *to the efficiency* of the material organs, but to the *reſtaint* which the ſoul is ſubjected to through their means. It is eaſy to miſtake the one of theſe dependences for the other, as I might ſhew by variety of examples; and yet they lead quite different ways, and to oppoſite concluſions. The reaſoning in the laſt ſection, if remembered here, and the principle laid down in the beginning of this, ſhew undeniably, that the perfection of rational thinking cannot be effected, or promoted by the dead matter of the ſenſory. Therefore, not to ſay any more on that head, I ſhall only farther add, that we talk ſo much of the *ſenſory*, and (though it is but barely inſtrumental in conveying outward motion to the percipient Being (*v*) ſuppoſe it ſo abſolutely neceſſary to perceiving; that at length we ſeem to fancy that the perceptive capacity lies in it alone; or at leaſt, that it is the firſt and chief thing that perceives. So much doth the ſound of the word [*ſenſory*] make us forget the nature of the thing! Nor do we ſtop here; but having once allowed it to be the *percipient*, we at length ſuppoſe it to be the *agent* alſo; though it is very certain from ſect. 1. and 2. that this ſame *ſenſory* is, after all, nothing but dead and *ſenſeleſs* matter. Why ſhould a ſenſory be at all neceſſary to the ſoul in a ſtate of union? This is certainly worth conſidering. Only for this reaſon, becauſe in a ſtate of confinement to a dark and cloſe cell, the action of external objects was to be conveyed to the ſoul, by ſome material part or other, if it were at all to be percipient of them. And it is thus kept at a diſtance from the objects themſelves, and receives information about them by the mediation of *another thing*, and with diſadvantage (*x*). Hence the ſoul is

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(*v*) See the Note (*n*) N° 15.) of the laſt Section.

(*x*) I muſt obſerve here, with reſpect to what is ſaid concerning ſenſories, that it is an exceptionable way of ſpeaking to ſay, *Univerſal ſpace is the ſenſory of the Deity.* I believe it is deſigned to ſhew us the neceſſary immenſity of God; or that ſpace which is *neceſſary* and *ſomething*, (not a pure negation) ſome way or other belongs to him. But the analogical meaning of the word *ſenſory* is not to be applied to a Being, whoſe life and perception can nei-

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at a great deal of pains, by the help of its other faculty of ratiocination to find out the true natures of objects, from this diſadvantageous and diſtant manner of perception. From this it appears we make a very falſe inference, when we conclude, becauſe ſuch a thing as this ſenſory is neceſſary to the ſoul in a ſtate of union, it muſt be equally neceſſary to it in a ſtate of ſeparation. This is to forget the difference of theſe two ſtates; or to think a *medium* of communication will ſtill be neceſſary, when we ſuppoſe the neceſſity removed. This is as if I ſhould ſay, the contrivance of a *camera oſcura* would ſtill be neceſſary, though I might look directly on the objects themſelves in broad and open day-light. For, as hath been remarked above (Note *(n)* N° 15 of the laſt ſection) we may conſider the *eye* as the *lens*, and the ſenſory as the ſheet of white paper which receives the *images*. But farther, it is neceſſary not only that images be formed on this ſenſory, but that the impreſſions of them remain there for ſome time after, when even the *artifice* of a *camera oſcura* cannot take effect; as in *darkneſs*, *ſilence*, and the *abſence* of the object. But theſe very conſiderations ſhew that none of this artifice will be neceſſary in a ſtate of ſeparation, when the ſoul is unconfined, and can therefore perceive at firſt hand what is done without, by applying *immediately* to the objects, or being itſelf directly acceſſible. Memory therefore by impreſſions muſt be unneceſſary in ſuch a ſtate (as has been aſſerted in the laſt paragraph); as much as a *copy* would be unneceſſary, when we might conſult the *original* itſelf. And when we are forced to own that it is the ſoul itſelf which perceives thus at ſecond hand, and under all theſe diſadvantages; we muſt alſo own that it will perceive at firſt hand with more eaſe; for this is ſtill but *perceiving*. Let me add one conſideration more with reſpect to this ſenſory, and impreſſions upon it, to ſhew the diſadvantages the ſoul is under in perceiving by the help of ſuch a material organ. It was neceſſary that this organ ſhould be *ſoft* and *yielding*, that it might be capable of receiving impreſſions from the leaſt force; the force to wit of the rays of light acting on the optick nerves, or other ſuch feeble action. And this very quality makes theſe impreſſions liable to be effaced or weakened by any the leaſt *contrary force*. So that it is wonderful they ſhould be preſerved for any conſi-

ther be *limited*, nor *enlarged*. This word is miſunderſtood (as I but juſt before obſerved) as if it were the organ without which the ſoul would be impercipient. But let it be taken in any ſenſe whatever, the Deity cannot ſtand in need of an organ of perception.

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derable time, as we find they are: and I can aſcribe this wonder to nothing but the Almighty hand of God, and his unſearchable Wiſdom. Let us then for once ſuppoſe that theſe impreſſions were as *laſting* and *durable*, as if they were engraven on marble or adamant: this would add no *new power* or perfection to the ſoul; and yet it would ſeem to act with more power and perfection in that caſe: Which may ſhew us how falſly we reaſon concerning the nature of the ſoul; as alſo how diſadvantageous it is to have theſe impreſſions made in ſuch ſoft and yielding materials *(y)*.

XIII. Moreover, ſince the conſtant action of the animal ſpirits upon this *ſoft* and *yielding* organ, is required, to keep the impreſſions in it patent and open, as they are while we continue awake; and ſince in ſleep theſe animal ſpirits are called from that function to other purpoſes; we may hence ſee the reaſon, why forgetfulneſs ſhould accompany ſleep, and the ſeat of memory be the firſt thing that is affected at that time. There is a plain neceſſity in the nature of the thing why it ſhould be ſo. This is not the defect of the ſoul, but the imperfection of matter. And yet even here we may admire the *Goodneſs* and *Wiſdom* of God. There is no miſtake nor blunder in the caſe, as has been ſaid. The œconomy ſtands in need to be rectified, the body wants reſpite from continued exerciſe and fatigue, and eſpecially the animal ſpirits themſelves are to be recruited. Sleep

(y) From this *yieldingneſs* and *ſoftneſs*, which a material ſenſory muſt have, becauſe of the uſe it ſerves for, we now ſee the reaſon why it ſhould be ſo eaſily *diſturbed*, and the impreſſions on it *diſordered*. Without *ſoftneſs* it could not have been a ſenſory; and without being *liable* to be diſordered, it could not have been ſoft. Hence a ſtroke, a fever, drunkenneſs, ſleep; nay exceſſive anger, joy, or any other violent paſſion, muſt diſorder it. Yet we charge all the changes and alterations which ſuch a yielding ſubſtance muſt undergo on the ſoul itſelf. We now diſcover that the ſoul and its powers remain ſtill untouched, though it muſt feel theſe diſorders. This conſideration clears up the difficulty of moſt appearances, and takes away their ambiguity or liableneſs to be miſtaken; and particularly in the next objection.

Others have obſerved how wonderful it is that ſuch a ſmall part as the ſenſory ſhould be capable of ſuch an incredible number of different and diſtinct impreſſions. And certainly, if we conſider an *adult perſon*, arrived to experience and knowledge, in whom this *ſmall part* contains more different characters than the largeſt volume, it muſt be reckoned a prodigious inſtance of wiſdom and power, to contrive ſuch a piece of art, and to work it up in ſo ſmall a room. But when we conſider the materials in which this is performed, liable to be jumbled by every motion; and that the characters are preſerved, notwithſtanding ſuch conſtant alteration; the wiſdom and power of this tranſcends all admiration.

therefore was to be *a ſtate of reſt and inaction*, no change was to be effected, nor was the ſoul any way to be concerned here. It is the God of nature that watches for us, and performs all in the animal œconomy, (ſect. 2. N° 12. to N° 18.) and recruits thoſe very bodies of ours while we ſleep. Thus there was no occaſion for memory when the ſoul had nothing to do; hence theſe impreſſions are ſhut up, when their remaining open could be no longer of uſe. There would have been an inconvenience if they had been patent and legible during the time of ſleep: the ſoul, awake by neceſſity, and active in its nature, muſt ſtill have perceived them, and fatigued the body with conſtant action beyond its ability to hold out, *i. e.* ſleep, and recruiting the body would have been thus ſtill impoſſible. But by a contrary method the activity of the ſoul is qualified and kept under, for the ſake of the body, that their oppoſite natures might be brought to *correſpond*, and bear ſome proportion to each other. We may perhaps fancy, that the ſoul might have been employed in conſtant contemplation while we ſleep; but then it muſt have indefinently directed the animal ſpirits to thoſe impreſſions, as while we are awake, and thus exhauſted the only matter in the body ſubjected to its command, and deſigned to be the ſole inſtrument and miniſter of the *will* in ſpontaneous motion. The body would thus have languiſhed, ſleep would ſtill have been impoſſible, and ſpontaneous motion muſt have become an intolerable fatigue. In endeavouring to perform more than was conſiſtent with the nature of body, the deſign and purpoſe even of a waking ſtate would have been fruſtrated. The active nature of the ſoul therefore was by all means to be reſtrained at ſome times, that the body might be in a condition to obey it at other times. Or again, we may perhaps fancy that at leaſt the ſoul might have acted by itſelf while we ſleep, without uſing any part of the body, or moleſting it in any manner. But if it had been thus indulged, if it had not been made dependent on the body to be limited by it all manner of ways, if it might have become a *ſeparate perſon* at pleaſure (ſo to ſay); it would have neglected the body altogether, and avoided being concerned in thoſe things which are to be done in a ſtate of union. How tedious and hateful muſt the body have been to it then! But now it loves it; cheriſhes it as ſomething belonging to itſelf; drudges for it! To think and act this minute as ſeparate ſpirits do, and the next minute to think and act as our embodied ſpirits *muſt do*, who are tied down to follow and obey the laws of matter, had been inconſiſtent: the tranſition muſt have appeared

peared ſhocking and unnatural. The Union demands that ſoul and body ſhould make but one perſon; but in this caſe there would have been evidently two. How unwillingly would the ſoul have ſubjected itſelf again to the laws of the body, after having taſted a pleaſure which would make them bitter! We demand conditions, without knowing what we demand. The ſoul now ſeeks to prolong the union: this is conſiſtent with farther views; and we ſee the *firſt cauſe* labours, both while we ſleep and while we are awake, to make the union ſubſiſt!

Here I beg leave to add one remark more. In the ſtate we have been ſpeaking of, when all is at reſt and ſilent, and the impreſſions on a *ſenſory* deſignedly ſealed up from the view of the mind; how eaſy is it to make *new* and *foreign* impreſſions there? Suppoſe then *ſome cauſe* comes, and makes impreſſions in a *different character*, (or rather this is matter of fact, and not a bare ſuppoſition) the ſoul, as always *alert* and *vigilant*, muſt perceive what paſſes; and that without memory of what hath paſſed before: for, as hath been ſaid, the impreſſions of former objects are ſhut up at that ſeaſon. And this ſeems to be the formal ratio of dreaming, or the manner in which it comes to paſs. Hence the ſoul muſt take all for *real:* it begins to act a part in theſe new affairs: if the ſcene is ſhifted, it cannot help that; it muſt take things as it finds them; but ſtill it is buſy and active, and takes a part in all ſcenes. And thus it would continue for ages, acting, defending, contriving, *&c.* as things required; if ſleep and theſe circumſtances were ſtill prolonged. If this be kept in mind, it will not be ſo difficult to advance ſomething intelligible on the nature of dreaming, as hath hitherto been imagined. But to return; from all this we may ſee what reaſon there was in the nature of things, why the activity of the ſoul ſhould be reſtrained in ſleep; and why it ſhould be barred from the perception of external things. And hence again we cannot but be convinced how neceſſarily it muſt be freed from all ſuch *hindrances* and *inequalities* in a ſtate of ſeparation. And if all this be intelligible, (as it ſeems to me) and highly reaſonable from the nature of a material ſenſory, and from the neceſſity of repairing the animal œconomy, and therefore of ſuſpending the power of the ſoul over the body; he muſt talk very unreaſonably who would turn the neceſſities of the body to an imputation on the ſoul. Let us act fairly between the two parts of our compoſition. The bodies are *ours*, but the ſouls are *us*, if I may ſo expreſs it: and he ſeems to revolt againſt himſelf, who raiſes

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the body above its rank. In a word, the ſoul cannot depend on the body as an *efficient* or *performing cauſe* of rational thinking: and that it ſhould depend upon it as a *limiting* or *impeding cauſe* can be no objection.

XIV. The next argument or objection is the appearance of drunkenneſs. *Lucretius* ſays, *the eyes then roll, the tongue faulters, the legs ſtagger; the ſoul itſelf is inebriated; noiſe, tumult, and quarrels begin (z):* therefore a ſoul that is ſo diſordered can be nothing but matter, or the reſult of a diſpoſition of matter. This doth not altogether differ from the difficulty laſt conſidered; and therefore a good part of that reaſoning will be applicable here, which I need not repeat. If ſome diſeaſes affect the ſenſory, (as every material part may be affected with ſome diſorder) drunkenneſs is a diſeaſe, and muſt, if any other, ſtrongly affect it. For ſpirituous and fiery liquors, mixing in great quantity with the blood, and being diffuſed into all parts of the body, and eſpecially the brain, (the *regia animæ*, as *Borelli* calls it above) muſt occaſion a *notable change* in the mechanical motions of the œconomy; ſomething very new and unuſual to the *Sentient* there reſiding. Sleep, which is at laſt brought on by all this *hurry* and *diſorder*, the head-achs, fevers, *&c.* which ſucceed, ſhew this to be ſo. And it is not only eaſily conceivable, that the percipient Being ſhould be affected with this commotion in the matter to which it is united; but (as I argued above in N° 10.) it is inconceivable that it ſhould not. How is it at all affected, or made percipient of external things, but by motion excited in the ſenſory? And if other unnatural motions are excited in the ſame ſenſory; how can it be impercipient of them, by the law and condition of its union? Indeed I may ſay, to ſatisfy the Sceptic, that the ſoul is immaterial, the body ſhould be liable to no diſorder, contrary to the nature of mechaniſm; or the ſoul ſhould feel no diſorder, contrary to the condition of their union: for then it would not be ſenſible even of the right order and diſpoſition of the body.

(z) *Denique cur, hominem cum vini vis penetravit*
Acris; & in venas diſceſſit diditus ardor:
Conſequitur gravitas membrorum? præpediuntur
Crura vacillanti? tardeſcit lingua? madet mens?
Nant oculi? clamor, ſingultus, jurgia gliſcunt?
Et jam cætera de genere hôc quæcunque ſequuntur,
Cur ea ſunt; niſi quòd vehemens violentia vini
Conturbare animam conſuevit corpore in ipſo?
Ver. 475.

XV. I might ſpeak to every particular in the preſent objection: but that would be too tedious. It hath been obſerved, that perception (of external objects) is regularly excited by certain modified motions through the organs *(a)*: and if theſe modified motions are diſturbed, or modified after an unwonted and ſtrange manner (as it is impoſſible they ſhould not in the preſent caſe) how can perception be regular? And this is applicable to more difficulties than the preſent. Some people ſtick by their bottle ſo long, till they do not know the perſons they ſat down with. Now if the like ſhould happen in the fit of a fever, or other diſeaſe; where is the wonder! It would be a wonder indeed, if ſuch a ſoft and yielding ſubſtance as the ſenſory, ſuffered as little alteration, as if it had the ſtrength and firmneſs of braſs. (See N° 12. above.) Again, *Borelli* hath obſerved, *that the ſoul acquires the habit of moving the parts of the body, and of ſending the animal ſpirits into this rather than the other part, by frequent trials and experiment*; and this is certainly true with reſpect to man: we ſee ſuch habits acquired in many caſes, after we are adult; though leſs true with reſpect to brutes, as ſhall elſewhere be remark'd. How is it poſſible then, it ſhould preſerve this art at that time; or not be diſturbed in the practice of it, by ſuch a hurry, and commotion, of theſe animal ſpirits, or whatever other ſubtile matter it employs to this end, when all the fluids in the body are in ſuch a hubbub and diſorder? There is rather a neceſſity that the legs ſhould ſtagger: all theſe *diſorders*, inſtead of being objections, are direct conſequences of a ſoft and yielding ſenſory, of fluids and animal ſpirits, eaſily put in motion, or diſturbed in their motion. And here I leave it to be conſidered, if the ſoul were a certain ſubtile matter, as is pretended by ſome; whether ſuch a rapid inteſtine motion and jumble would not diſſipate it into a thouſand atoms, and the leaſt diſorder of this kind become certain death *(b)*. Farther, let it be obſerved, and indeed every body muſt have obſerved it, that a piece of

(a) Note at *(n)* N° 15. of the laſt.

(b) Or, *if the ſoul reſults from a certain diſpoſition of parts*; how can it reſult from a contrary diſpoſition of theſe parts? Or if it reſult from any intermediate degree of diſpoſition; the difficulty will be, not that it feels the diſorders of the body, ſince it reſults even from theſe; but why it is not conſtantly changed *fundamentally*, ſince the cauſe of it is conſtantly changed; for every new change is ſtill *productive* of the ſoul. It ſhould then be but a quality conſtantly produced; and therefore *never the ſame*; as the flame this minute is not the ſame with the flame that was laſt minute: and how can one quality be the ſubject of other qualities? In ſhort, the ſoul cannot be the reſult of one individual diſpoſition of matter:

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of mechaniſm ſo rude and clumſy as a clock is, doth not go after the ſame preciſe tenor, in the different extremes of heat and cold: and if a piece of mechaniſm finer and finer ſtill, were liable to greater and more ſenſible alterations; this would never infer that it was moved without a *power*, or had no other mover, but the *mechanical configuration of parts*. Hence therefore, if it is certain from other reaſons, that the ſoul is immaterial; theſe different affections it ſuffers from the body, can avail nothing to conclude, that it was but the reſult of mechaniſm. Laſtly, let us conſider that a man is in a different temper from himſelf, when without the circumſtances of the preſent phænomenon, and perfectly ſober: as when calm or in paſſion, in affliction or joy, *&c.* where the ſoul affects the body, inſtead of being affected by it. Yet no man would make this difference an argument for material ſouls. Such a circumſtance, where the *reverſe* of the thing objected happens, ſhews that men miſtake this appearance wilfully. For as Mr. *Wollaſton* well argues, a *ſingle word* ſpoke, or ſuppoſing it but ſpoke, or miſtaking one word for another, or *looking* ſimply on a piece of paper where it is written, fills the ſoul with rage and fury; and thence at length diſturbs the body. And how can that thing be material, which is ſo violently affected without material action? Certainly a word ſcrauled with ink on paper, hath no force or *moment*, to excite motion in matter, nor one word more force than another.

XVI. The next argument for the materiality, is taken from *fainting*, and other kind of fits, where all ſigns of life forſake the body, which yet afterward return (*c*). The modern Sceptic improves on this, from experiments

for then *every change* of that diſpoſition ſhould be *certain death*. Nor therefore can it reſult from a right diſpoſition of matter; for that is *individual*. And if it cannot reſult from a right diſpoſition, or a regularity of diſpoſition, it would be abſurd to ſay, it reſults from the diſorder and irregularity of diſpoſition. This very eaſy and ſhort conſideration will ſatisfy a man all at once that the ſoul is not material, without having recourſe to other methods of reaſoning. So, that, as was ſaid N° 1. of this ſection, the very objections againſt the immateriality of the ſoul afford a clear and convincing proof that it is immaterial.

(*c*) *Quin etiam, finis dum vitæ vertitur intrà,*
Sæpe aliquâ tamen è cauſâ labefacta videtur
Ire anima; & toto ſolvi de corpore membra.
Ver. 591.

Alſo,

Quin etiam, ſubitâ vi morbi ſæpe coactus

Ante

experiments on living creatures in the *air-pump*, and from ſome inſtances of perſons, who have recovered, after they have been thought dead for ſome time. " Theſe experiments and inſtances, ſay the patrons of mate-" rial ſouls, ſhew that *life* and *perception* are only the effects of mechanical " motions in the body, ſuch as circulation and reſpiration: becauſe when " theſe motions are ſtopt, life and perceptivity ceaſe; and whenever they " are recovered, life and ſenſe return again. Or if the ſoul were really " a diſtinct living being, how can we imagine that it would *linger*, and " ſtay in a body as good as dead; and not rather fly away immediate-" ly?" This objection directly argues for the *poſſibility* of a contradiction; That matter may riſe to the perfection of thought, reaſon, and ſelf-motion, by being moved mechanically. But I argue thus with the objectors. *Matter may riſe to thought, reaſon, and ſelf-movency, without being moved at all, or without any cauſe; and that all matter may become living and thinking, without any reaſon.* This is my argument; and if they can find any medium to prove it abſurd, they will have anſwered their own objection. For if they ſay it is perfectly abſurd, that any effect ſhould be without *all cauſe*; I own it, and apply it to *reaſon*, *ſpontaneous motion*, and *life*, which in their objection are effected abſolutely without all cauſe; ſince, as has been ſaid above, the cauſe aſſigned is as void of power to effect theſe, as the abſolute negation of all cauſe is. A particle of matter, by being impelled to motion becauſe of its reſiſtance, is no cauſe, nor any thing like a cauſe, why it ſhould become living and reaſonable. Double the number, and double the motion; and, as hath alſo been ſaid, it is but the *negation of the cauſe doubled:* and ſo on. If they allow my argument good; I proceed, and ſay, *There is no difference between poſſibility and impoſſibility.* If they can ſhew me a difference, I apply it ſtill to their own objection. If they grant there is no difference; then I conclude, They want a ground in the nature of things, to object againſt any thing I ſay, or advance: for all objections ſuppoſe a difference between poſſible and impoſſible *(d)*. So certain is it that the ſceptical principle takes away the

Ante oculos aliquis noſtros, ut fulminis ictu,
Concidit; & ſpumas agit; ingemit; & tremit artus;
Ver. 486.

(d) I would here obſerve in general, That if an objection is not clogged with a contradiction, one may liſten to it; but if the objection itſelf is contradictory, a man cannot propoſe it as an objection, but by thinking that contradictions may be true; in which caſe he is in-

the difference between truth and falſhood, and introduces an univerſal defect of reaſon in philoſophy! This might ſuffice: but I add, If they would reflect, that it is the law of the union of an immaterial ſoul to a body, that the ſoul cannot actuate the body, nor be apprized of external action by it, unleſs the mechaniſm of it be in a right order and diſpoſition; otherwiſe there would be no need at all of an organized body, but *any parcel of matter* might be the body of an animal; if they would reflect on this, I ſay, or only take it but for a poſſible ſuppoſition, they would ſee that *ſuch examples* and *experiments* muſt take place as much on that ſuppoſition, as when they ſuppoſe that there is nothing but matter in the animal. This renders theſe inſtances *equivocal*, and liable to be miſtaken; and they have pitched on the impoſſible concluſion.

XVII. Let us once more reſume the example of a watch, or clock, that we may ſee what is here aſſerted to be true, really effected in a parallel caſe. The immaterial impulſe of gravity or elaſticity is the *power*: The conſtant action of this *power* is neceſſary to make the machine go. It is therefore properly the *mover*; or, if we might ſo ſay analogically, the *living principle* and *ſoul* of the engine. Yet the due configuration and diſpoſition of the parts is alſo neceſſary: and, ſuppoſing that to be perfect in all the ſeveral pieces; it is ſtill farther neceſſary, that there be no accidental impediments; not only nothing wanting that ſhould be there; but nothing preſent that ſhould not be there. And how many thouſand ways may ſomething of this kind happen? Or, how contemptible a thing may prove the impediment, even in ſuch rude mechaniſm? a grain of ſand, the ſmalleſt hair. It is farther no leſs neceſſary that the machine be kept dry, and the whole refreſhed, (to ſpeak ſtill in the terms of an animal body) by winding up, once perhaps every four and twenty hours. Theſe ſeveral things are all neceſſary, that there may be no impediment, though not neceſſary as *efficient cauſes*: and if the leaſt requiſite is want-

capable of an anſwer; for to him then *truth* itſelf may be *impoſſibility*. If he is to be determined by reaſon therefore, he ſhould think firſt with reſpect to his own objection, it cannot be true nor real, ſince it infers a contradiction. The end of all reaſoning in the world is to keep free from contradiction; but it would be abſurd to ſuppoſe one contradiction real and true in order to keep free from another. Though my Adverſary were inattentive enough, not to obſerve the repugnancy of what I ſay; though he ſhould allow his own poſition to be overthrown; that cannot make it yield ſatisfaction to my own mind. This is ſo far from proving what he ſays falſe, that ſince our aſſertions *are contraries*, it proves his aſſertion true.

ing,

ing, or the leaſt thing ſuperfluous preſent, though the power ſtill remains, and acts (or impels the dead parts) as at other times, the machine no more tells the hour, minute, day; or anſwers any of the ends it was deſigned for, than a picture of it drawn on paper would. In ſhort, it is as dead, as if there were no power preſent, or acting. Let me here, by the by, reflect on the adorable power and goodneſs of God. How much more exquiſite is the mechaniſm of our bodies! how infinitely more complicated! and how much more brittle are the materials! And yet we live! nay enjoy health, ſtrength, *&c.* unleſs by our own faults. Now, from this liableneſs in the machine to fall into fainting-fits, and to have all ſigns of life ſuſpended in it, (continuing ſtill to uſe the analogical terms) or from the recovering of it again; no body would ſay, that theſe mechanical motions, while continued, were conſtantly productive of, either the mechanical power of the engine, or yet, of a certain other power, which riſes to the performing wonders quite above mechaniſm. I need not go on with the compariſon: the application is obvious, and ſhews that the objection proceeds from much inattention. Let me only obſerve, that the ſoul may ſtill be preſent, though no ſigns of life appear about the body; for, as was ſaid in N° 6. we can ſee but with bodily eyes; and the activity of the ſoul is only diſcoverable by motion in the body; and that motion is performed mechanically. *Ye did not ſee my ſoul all along* (ſays *Cyrus* on his death-bed to his ſons); *but diſcovered it only from thoſe things, which it performed in the body* (*e*). If therefore the mechaniſm be obſtructed, mechanical motion is ſtopt, and the animal muſt appear dead. Though nothing is wider from a juſt concluſion, than that the ſoul is dead; or *reſults only* from the mechanical motions in the body. If that were ſo, how could it be other than a new ſoul, kindled up again, after the mechanical motions were begun anew, which would never make the ſame conſcious being as before. The ſoul muſt be continually *generated*, with every new reſpiration, and pulſe of the heart; and continually *ceaſe to exiſt*, as the motions ceaſed that cauſed it. We might as well ſay that every motion of the balance or pendulum of the watch ſhould beget

(*e*) Οὐδὲ γὰρ τοῦ τοι τὴν γ' ἐμὴν ψυχὴν ἐωρᾶτε, ἀλλ' ὡς δὲ ἐπράττετο, τούτοις αὐτὴν ὡς οὖσαν κατεφρονεῖτε, apud Xen. We have this more at large in *Cicero*, *Nec enim, dum eram vobiſcum, animum meum videbatis: ſed, eum eſſe in hoc corpore, ex iis rebus, quas gerebam, intelligebatis.* The concluſion is, *Eundem igitur eſſe credite te, etiamſi nullum videbitis.* Or rather this ſentence is loſt in the Greek ſince *Cicero*'s time, as appears by what follows.

thought: and how theſe independent thoughts could be applied to one ſubject, or conſtitute a thinking Being, is inconceivable (*f*).

XVIII. As to the ſoul's *not flying away immediately:* how can it without licence? Who is judge of the time? This proceeds on the ſuppoſition of want of government and providence in this momentous juncture (*g*). As was argued before, if the power of a governing Cauſe is conſtantly exerted upon inanimate matter; and if all the changes in the manner of its exiſtence require his concurrence; how much more muſt the rational and living part of his works, for which all the reſt were deſigned, challenge his care and providence? If we were to aſſign a proportion here, as certainly there cannot be a defect of proportion, how great would the difference be! Beſides, is it not *by his power*, that the diſorders of the circulation, reſpiration, &c. are again rectified; and by his power that they continue ſtill to be performed, after they are rectified? And why ſhould the ſoul have liberty to leave the body, He continuing to exert his almighty power in keeping up the œconomy? Or before the final ineptitude is ſuffered to take place? (See N° 21. of the laſt Section.) Since the *union* requires his particular act and intervention; the *ſeparation* muſt alſo require his particular act and intervention; otherwiſe the union would be vain, and the deſign fruſtrated.

(*f*) What is here ſaid ſets the reaſons for the immateriality of the ſoul in a new and different light. It is very abſurd that the ſoul ſhould be ſucceſſively generated by every pulſe of the heart, or blown up with every reſpiration of the lungs. A power may be inherent in, or belong to one certain ſubject; but that a power ſhould be hourly produced by mechanical motion, conſtantly begot, conſtantly die; have no ſubject to reſide in; and be itſelf the ſubject of other powers and capacities, as the *ſoul of man* is, are abſurdities not to be parallelled. *This power* muſt then conſiſt of *parts*, parts infinitely ſmall, according to their momentary production: it would be a fleeting, ſucceſſive thing; the parts of it independent, which could never make a *continued conſciouſneſs*. Such a ſoul could have no nature, no conception belonging to it: it is as if we ſhould ſay, *Duration is a power, motion is a ſoul*; or we might ſay any other thing we pleaſe, provided it be but abſurd enough: The Sceptick can have no idea or conception belonging to ſuch aſſertions. And all this is as applicable to his ſuppoſition that the ſoul is *produced* by the mechanical motions of the body, as to the ſuppoſition that *thought* may be produced by the balance of a watch while it beats. An impoſſibility in the one caſe, muſt be no leſs an impoſſibility in the other.

(*g*) *Niſi enim Deus is, cujus hoc templum eſt omne, quod conſpicis, iſtis te corporis cuſtodiis liberaverit, huc tibi aditus patere nequit.* Cic. ſomn. Scip.

XIX. *Lu-*

XIX. *Lucretius* makes it an argument of the ſoul's being material, *that it doth not leave all the parts of the body at once, rejoycing, as a ſerpent to lay down her exuviæ* (*h*). Here it is to be obſerved, that he makes that which he calls the ſoul, to be diſſeminated through the whole body (*i*): but he forgets to conſider that the appearance, which he brings as an objection, agrees better with the contrary hypotheſis, than his. For if the *Sentient* in the body is a different ſubſtance from matter, it muſt feel the limbs become gradually incapable of being actuated, as the diſorder of the mechaniſm increaſes; whereas on his ſuppoſition of a *dividuous* ſoul, which dies in one limb after another (*k*), the limb would be quite void of pain, as if it were cut off. His ſcattered ſoul doth not agree with the anatomy of an animal body, where all the nerves terminate in one place, and convey all the external motions impreſſed thither (*l*). There is ſomething full of a childiſh ſimplicity in ſuppoſing, *that a man ſhould feel his ſoul go out whole and entire, through his throat.* This is ſuppoſing it ſtill material; that the parts

(*h*) *Nec ſibi enim quiſquam moriens ſentire videtur*
Ire foras animam incolumem de corpore toto;
Nec priùs ad jugulum, & ſuperas ſuccedere fauceis:
Verùm deficere in certâ regione locatam:
Ut ſenſus alios, in parte quemque ſuâ, ſcit
Diſſolvi: quòd ſi immortalis noſtra foret mens;
Non jam ſe moriens diſſolvi conquereretur:
Sed magìs ire foras, veſtémque relinquere, ut anguis,
Gauderet, prælonga ſenex aut cornua cervus.
Ver. 606.

(*i*) *Sic anima atque animus per ſe nil poſſe videntur:*
Nimirum quia per venas, & viſcera miſtim,
Per nervos, atque oſſa tenentur corpore ab omni.
Ver. 564.

And again,

Namque ita connexa 'ſt per venas, viſcera, nervos
Oſſaque; uti dentes quoque ſenſu participentur.
Ver. 691.

(*k*) —— *Inde pedes, & crura mori: pòſt indè per artus.*
Ire alios tractim gelidi veſtigia lethi.
Ver. 627.

(*l*) It is extremely remarkable, I think, that *Lucretius* ſays, if the ſoul were immaterial, or did not grow up with the body; that would have been the caſe, which is really the caſe.

Sed velut in caveâ, per ſe ſibi vivere ſolam
Convenit; ut ſenſu corpus tamen affluat omne.
Ver. 684.

of

of the throat and it ſhould *act* and *re-act* againſt one another; while he is making it an argument, that this would be the appearance, if it were immaterial. Why ſhould the *throat* be the out-let to the ſoul? Doth immaterial ſubſtance want an open paſſage and room? *Efflare animam* is but a metaphorical expreſſion. He ſuppoſes perhaps, that his Adverſaries place the ſoul in the lungs, as he places the mind in the middle of the breaſt (*m*). He fancies alſo that the man hath ſtill ſenſe and perception left in the parts of his body, when that which he allows to be the Percipient hath abandoned them, and is taking its flight. But theſe are the abſurd prejudices of an infant; not the reaſoning of a Philoſopher.

XX. Theſe are the arguments for the materiality of the ſoul, in all which it is obſervable, that the reaſons are not drawn from the nature of either ſubſtance ſeparately, as they ought to have been; nor is it conſidered what kind of appearance they muſt make, if they are united (ſee N° 20. of the laſt); but the *dubious* and *equivocal phænomena* of the whole compounded are pitched upon, where the reaſoning of courſe muſt become *perplexed*; and the diſorders of the material organs, are imputed to the living and percipient Being which uſes them. This is directly contrary to the method that ſhould have been taken. Men begin with the ſimpleſt things, and thence proceed to more complicated caſes. Mathematicians at firſt demonſtrate truths ſo eaſy that they ſeem trifling: but what a wonderful ſuperſtructure of ſcience do they raiſe on that plain foundation! Juſt ſo, the *inactivity* of matter is a plain and obvious quality, the firſt notion that all men, without exception, entertain of it; though they are unacquainted with the philoſophical term, *vis inertiæ*; and the *inconſiſtence of inactivity and active power* is a ſelf-evident truth. Proceeding then fairly and ingenuouſly with theſe principles, what a ſcene of things do we not diſcover, performed by immaterial power, both in the animal body and without it! Farther, if inactivity belongs to matter; *power and perceptivity muſt certainly belong to another ſubſtance.* This is no leſs ſelf-evident. And then to collect what farther is neceſſary to be known about active perceptive Being (as above) whether in a ſtate of union or ſeparation, cannot be extremely difficult. This, I conceive, is the proper method. It is true *Lucretius* brings ſtore of other argu-

(*m*) —*Conſilium, quod nos animum mentêmque vocamus:*
Idque ſitum mediâ regione in pectoris hæret.
Ver. 140.

ments for the immateriality of the ſoul; but they are ſuch as need not be mentioned. He generally touches on ſomething that falls in with a common prejudice, or is apt to raiſe a ſcruple at firſt view; but having done that, he is forced to leave it; for that is all that can be done. The ſubject will not abide an argument, or bear being examined on all ſides (*n*).

XXI. We may take notice, before we leave this ſubject, that as there are many ſymptoms in the compound of ſoul and body, occaſioned by the material half, which ſhew defects incompetent to a ſpiritual Being; and from which the objections above are drawn: ſo there are not wanting others which ſpring from the active nature of the ſoul, and as clearly ſhew *that part* of our compoſition. I do not mean life and ſpontaneous action, nor thought and reaſon, which are conſtant and obvious appearances, utterly incompetent to material ſubſtance; but other phænomena leſs obſerved; one or two of which I beg leave here barely to name. One altogether inconſiſtent with the materiality of *that thing* which thinks in us, is, that we are ſometimes ſo wholly occupied in the contemplation of ſome abſent object, or ſome purely ideal thing, that we are quite impercipient of objects round us, and which at preſent act upon our

(*n*) Of this kind is the objection, that material and immaterial (or, as he wilfully miſ-names them, mortal and eternal) ſubſtance, could not be united at all, *ver.* 801.

> *Quippe etenim mortale æterno jungere; & unâ*
> *Conſentire putare; & fungi mutua poſſe;*
> *Deſipere 'ſt:* ———

But on the contrary, it is really impoſſible that activity and inactivity, life and deadneſs, can conſiſt in the ſame ſubject [matter]. Thence follows a very undeniable neceſſity of two different ſubjects of inheſion, *viz.* material, and immaterial ſubſtance: and then it is *madneſs* indeed, (*in him*) to deny the poſſibility of their union, which is thus eaſily ſhewn to be fact. Yet how ſtrong a difficulty is this made by modern Scepticks! Again, he ſays, "Since the body cannot "ſubſiſt without the ſoul, but putrifies (*ver.* 579. & *ſeq.*) we need not doubt but that this hap"pens, becauſe the ſoul, being ſcattered through all the body, hath evaporated, like ſmoke, "through the pores." Here a poor ſcruple is endeavoured to be raiſed from putrifaction; as if the body were not liable to putrify and be corrupted, in many caſes, while the animal lives; or were always liable to that, when it is dead. Again he ſays, "How could ſuch a thin thing "as the ſoul ſubſiſt, without the tegument of the body?" (*ver.* 602.) To keep it warm perhaps!

ſenſes.

ſenſes (*o*). Certainly a *preſent object* ſhould more powerfully ſolicit a material percipient, by its conſtant and real action, than things diſtant in time and place, which do not act at all, or than *abſtract ideal objects*, which cannot act. I need not give examples of ſuch as are in grief, anger, fear, love; every one will remember ſuch inſtances, either in himſelf or others, as are altogether unaccountable, if the Percipient within us were material. A man may ſit in a full company at table, and neither hear nor ſee what is done round him. And a diſorder of the body cannot ſo much as be pretended here. It happens entirely from the ſimplicity of the attention, or perceptive faculty, which cannot apply intenſely to more things at once (*p*); and from its voluntarily employing itſelf in the earneſt conſideration of ſomething abſent, whereby it becomes impercipient of the action of material objects upon it. And neither this ſimplicity of the attention itſelf in any manner accords with a material percipient (N° 8. Sect. 3.) nor the voluntary turning it away from the preſent ſolicitation (N° 4. of this.)

XXII. Moreover our bodies muſt be always in contact with ſomething or other, which ſupports their weight; and this, whether we *walk*, *ſit* or *lie*; that is to ſay, ſince action and re-action are equal, our bodies are always preſſed with a force equal to their own weight. This preſſure is conſtant, and ſtill the ſame, when the body is beſt diſpoſed. But if the Percipient within us were material, this great and conſtant preſſure ought to ſolicit it conſtantly, and as much as any preſſure or force that were not greater; which indeed is not ſo: for often it is not

(*o*) "Sometimes (ſays Mr. *Locke*, *b.* 2. *ch.* 19. *ſect.* 3.) the mind fixes itſelf with ſo much "earneſtneſs on the contemplation of ſome objects, that it turns their ideas on all ſides; remarks "their relations and circumſtances; and views ever part ſo nicely, and with ſuch intention, that it "ſhuts out all other thoughts, and takes no notice of the ordinary impreſſions made then on the "ſenſes, which at another ſeaſon would produce very ſenſible perceptions." It were to be wiſhed that the Author had applied this to the poſſibility of matter's thinking.

(*p*) *Lucretius* is very explicite in aſſerting this ſimplicity of the perceptive faculty, when it ſerves his turn; though it be altogether inconſiſtent with his principles.

Et tamen, in rebus quoque apertis, noſcere poſſis,
Si non advertas animum, perinde eſſe quaſi omni
Tempore ſemotæ fuerint, longéque remotæ.
Cur igitur mirum eſt, animus ſi cætera perdit,
Præterquàm quibus eſt in rebus deditus ipſe?
Lib. 4. ver. 809.

percipient

percipient of this force at all, and often it is more percipient of a smaller force. Nor can it be said that the continual pressure gradually lessens the sense of the force impressed; for the force constantly acts, and the impression is constantly made, and the mind at any time becomes percipient of it, by directing the attention thither. The true cause therefore is that just now assigned. All the parts of our body are constantly touched, or acted upon, by something or other; and yet we are rarely percipient of this, but by a particular act of the will, directing the perceptivity to this, or to the other part. Indeed, taking in the consideration that the perceptivity is simple, or but one; if the percipient were material (a solid, resisting percipient) the strongest material solicitation ought always to solicit it most; and therefore to engross it. That is, our perception would be precisely mechanical; and constantly determined by the greatest material solicitation. What kind of thinking could be made up out of this! How much better then is it ordered than the Sceptic would have it! It appeared before (N° 29. Sect. 2.) that the perceptions of a solid resisting percipient ought to be mechanical and necessary; but the present consideration, I think, shews us the formal manner of that necessity (*q*).

XXIII. As all material action ought to solicit a material percipient; so I might here farther insist upon what was only hinted at, from Mr. *Wollaston*, at the end of N° 15. *that nothing but material action could solicit it*; which is an equally necessary consequence of the materiality. And in pursuing this, it might be shewn, that the strongest passions and emotions in the soul, are excited by no material action, or not by the strongest material action, contrary to plain and obvious reason, on that supposition. No one object, equally near, and equally illuminated; nor found, equally

(*q*) It is worth observing here, that since a solid extended percipient would necessarily have its perceptivity excited by material action upon it, and resistance or re-action effected in it by its solidity; since this perception would be precisely proportional to the force of the material impression, *i. e.* mechanical; and since therefore (the simplicity of our perceptivity being considered) the greatest material solicitation would be only perceived, or at any rate most perceived; since, I say, these are necessary consequences of matter's thinking, and yet all false and contradictory to experience, it is worth observing that *Hobbes*'s solution of perception which is exactly this here given, appears thus all at one view absurd and ridiculous. For he makes perception to consist in resistance, re-action (*de sensione & motu animali*); contra-pression, ἀντιτυπία (*Leviath.* cap. 1.) which plainly infers all that is here asserted.

ſtrong, hath more material impulſe than another. It might alſo be ſhewn, (from this principle, the want of material ſolicitation, I mean) that the power of forming abſtract ideas, or abſtracting perception from all matter; the power of imagination, or forming compound ideas no way impreſſed by matter; I ſay, it might be ſhewn by particular deductions from this principle, that theſe, and other activities of the ſoul, could no way belong to a material Percipient. But paſſing by theſe, (ſince the theory in Sect. 2. makes theſe minute ways of arguing unneceſſary;) I ſhall only name another particular, that ſhould practically ſatisfy us of the immateriality of our thinking part. And that is the conſideration of the *indefeaſibleneſs* or *unweariedneſs* of the principle of thought in us. We feel our bodies every now and then ſinking down under their own infirmities: but the thing that thinks in us would never give over, if the body could keep up with it. It is buſy all the day with the body, and all the night without the body, and all the day with the body again: and thus in a conſtant circle, without reſpite or intermiſſion that we can perceive (N° 23. of the laſt) by our ſtricteſt enquiry. For the body no ſooner ſinks down in wearineſs and ſlumber, than this thing within enters freſh upon other ſcenes of action; and hears and ſees things worth enquiring into: and this without the ſubſerviency of its organs, which are then diſabled from their function. That which lives and perceives in us, lives and perceives at all times; if its vital and perceptive faculty could be duly applied to by fit objects; as from this particular it appears: and from which alſo it appears, that it can be otherwiſe applied to, than by external objects through the ſenſes. Now, without puſhing this argument as far as it was urged in the laſt ſection, or taking notice of the particular reaſoning there, here is ſuch a contrariety of natures obviouſly diſcoverable, that it is a wonder men could ever find in their hearts to aſcribe them to the ſame thing. This principle itſelf cannot certainly be body, nor the reſult of the fit diſpoſition of body, being ſo inceſſantly active, when the body lies in a ſtate of temporary death, becauſe of indiſpoſition *(r)*.

(r) This contrariety of natures, *viz.* the indefeaſible activity of the ſoul, and the ſucceſſive failing of the body, proceeds from the ſimple nature of the ſoul, which hath no parts, (ſect. 3.) ſo that it can loſe nothing of itſelf by action; and from the body as made up of parts that are always in flux, and of which a conſtant waſte is made in all mechanical and voluntary motion.

XXIV. Laſtly,

XXIV. Laſtly, thoſe very defects, which have hitherto been ſuppoſed marks of the materiality of our ſouls, by the help of a little attention, plainly ſhew the contrary. What is the cauſe that while awake, I am ſenſible of external action; and not ſenſible of it while aſleep? A material Percipient within me ought at that time alſo to perceive the action of external objects; or not to perceive it, becauſe of ſome diſorder in matter. And thus the perceptivity and activity of matter ſhould wear out once in the four and twenty hours; till the diſorder were rectified, and that diſpoſition reſtored, which made it living and ſenſible. Again, I cannot ſubſiſt without food, though but for a few days; nor toil conſtantly, but for one whole day perhaps, without running the whole œconomy into diſorder. Theſe and a thouſand other inſtances ſhew that, if activity and perceptivity belong to matter, they belong to ſome certain order and diſpoſition of it. There is no appeal from this concluſion *(s)*. And yet there is no poſſibility of making this concluſion, but by allowing the truth of all manner of contradictions (N° 2, 3, and 15.) This brings the diſpute to a ſhort iſſue. So that in effect, our very *eating*, *drinking*, *ſleeping*; our taking medicines, curing our diſeaſes, our *weakneſs* as well as ſtrength, our *ſickneſs* and health; every circumſtance and accident of our bodies, ought eaſily and practically to ſatisfy us at all times, of the immateriality of our ſouls; if we accuſtom ourſelves to think with exactneſs and propriety on this ſubject. Therefore, though it hath been here all along allowed, and ſuppoſed, that theſe effects are *equivocal* and *fallacious appearances*; yet we are now at laſt to correct that ſuppoſition: for in truth there appears no ſymptom, or defect, or accident in the body that is equivocal, or could follow equally from either hypotheſis: but thoſe very appearances hitherto called ambiguous, conclude againſt the materiality of the ſoul, which they were brought to ſupport.

(s) To make theſe independent of any order, or any diſpoſition of matter, would be to make all matter neceſſarily active and percipient. See alſo again the reaſoning at note *(b)* N° 15. above.

SECT. VI.

An eſſay on the phænomenon of Dreaming, wherein is ſhewn from the inertia of matter, and the nature of mechaniſm above explained, that this appearance cannot be the effect of mechaniſm, or any cauſe working mechanically; and thence that it muſt be the effect of a living, deſigning cauſe. The ſeveral hypotheſes for ſolving this appearance mechanically, particularly examined, &c.

THE moſt remarkable Authors who have aſſerted the materiality of the ſoul, have in conſequence of that aſſertion, been ſolicitous to account for the phænomenon of dreaming mechanically, or ſo as to keep free of any living and intelligent cauſe; as *Democritus*, *Epicurus*, *Lucretius*, *Hobbes*; as alſo *Ariſtotle*, though he is not explicite as to the materiality of the ſoul (*a*), and certainly was no Atheiſt (*b*). Others, becauſe of the inconſiſtency of our dreams; that is,

(*a*) He ſays, it is not body, and yet cannot be without body, —— Καὶ διὰ τοῦτο καλῶς ὑπολαμβάνευσιν οἱ δοκεῖ μήτε ἄνευ σώματος εἶναι, μητε σῶμα τι ψυχή· σῶμα μὲν γαρ οὐκ ἐσι, σώματος δέ τι. Καὶ διὰ τοῦτο ἐν σώματι ὑπάρχει. De anima, lib 2. cap 2 It ſeems then it is ſome power or property of body, the ſubject of other powers and properties. This is poor for the *prince* of *philoſophers*. He comes nearer the truth in another place, as ſhall be obſerved elſewhere.

(*b*) He aſcribes in the following compariſons *fore-ſight*, *order*, *government*, and *juſtice* to God. Καθόλε δὲ, ὅπερ ἐν νηὶ κυβερνήτης, ἐν ἅρματι δὲ ἡνίοχος, ἐν χερῶ δὲ κορυφαῖος, ἐν πόλει δὲ νόμος, ἐν φρατοπέδῳ δὲ ἡγεμών· τοῦτο Θεὸς ἐν κόσμῳ. And to ſhew that the compariſon comes ſhort, he adds, Πλὴν καθ' ὅσον, τοῖς μὲν, καμπτῆρ τὸ ἄρχειν, πολυκίνητόν τε, καὶ πολυμερίμνων· τῷ δὲ ἄλυπον, ἄπονόν τε, πάσης κεχωρισμένον σωματικῆς ἀσθενείας· κ. τ. λ. De Mundo cap. ii. ubi de Deo. One might make variety of obſervations from this place, upon the inconſiſtency of the preſent *Ariſtotelian Atheiſt*. Nor is *Ariſtotle* himſelf (though no Atheiſt) conſiſtent, who makes

is, becauſe the viſions then exhibited to the ſoul, are, for the moſt part, not of the ſame nature, or in the ſame order of nature, with external objects; for in that, I preſume, the ſuppoſed inconſiſtency will be found chiefly to lie; others, I ſay, becauſe of this, have aſcribed the perfection of rational thinking to the matter of the body, which opinion Mr. *Locke* ſeems to favour. And others, becauſe theſe viſions have no real external objects, of which they are repreſentations, have endeavoured to maintain *that there are no ſuch real external objects*; at leaſt this was the reaſon why the real exiſtence of material things was firſt called in queſtion, or ſuppoſed a point which might admit of diſpute. Theſe ſeveral opinions ſhew us, that the conſideration of this ſubject is not foreign to the preſent enquiry, but falls in naturally as a part of it; and therefore may farther ſerve as an apology, for attempting to account for this appearance conſiſtently with the principles before eſtabliſhed, eſpecially the inactivity of matter; and for endeavouring to ſhew that it infers none of thoſe abſurdities, with reſpect to the rational nature of the ſoul, which are commonly urged from it; but rather proves to us the exiſtence of ſome ſeparate immaterial agents. Thoſe who are ſatisfied from what goes before, that the natural powers of matter (as they are called) and of mechaniſm, have been extended much too far in the ſolution of the phænomena of nature, or rather that there are in truth no ſuch powers; will readily allow that they can have no ſhare in producing the preſent phænomenon: and thoſe who ſtill think that *this particular appearance* of dreaming, is an exception to all that has been ſaid in the preceding part of theſe papers, will be beſt ſatisfied by going on to examine circumſtances minutely. If indeed this be an exception to all that is ſaid, *nothing at all is ſaid*; and if what has been ſaid be ſolid, this, I hope, will not be found an exception to it. However, ſuch an intricate ſubject cannot be cleared up in few words; therefore let me beg the attention, and candor of thoſe who may have leiſure to read *this part* of theſe papers; otherwiſe reaſons may be condemned before they are heard. We ſhall find this advantage from the *above-named Authors* having written upon this ſubject before, that it will be the more eaſy to aſſign, and fix upon, the

makes God the ſole determining principle in his *incorruptible, ingenerable, neceſſary* world [ὃν ἀκινήτῳ γαρ ἰδρυμένος, continues he, πάντα κινεῖ, κ᾽ περιάγει, ὅπου βουλεται, κ ὅπως, ἐν διαφόροις τε ἰδίαις καὶ φύσεσιν]. A neceſſarily-exiſting world could have no determining principle of its manner of exiſtence, no change or viciſſitude in it. But all this only by the by.

ſymptoms,

ſymptoms, accidents, and things remarkable about dreaming: and it cannot be unfair to argue from an Adverſary's account of the thing in diſpute. For this reaſon, I ſhall be particular in giving their ſenſe in their own words, leſt it might be thought a falſe gloſs had been put upon them. Nor ſhall I always take the advantage of arguing from ſuch pregnant inſtances, as *they themſelves* allow to be *fact*; but reaſon from common and ordinary examples. The method inſiſted on ſhall be, firſt to give a natural ſolution of the appearance itſelf; and then to anſwer the objections that may be raiſed againſt it. And here all the collateral appearances that might be urged, ſhall be taken into conſideration; and the affinity between poſſeſſing the fancy in ſleep, or dreaming, and poſſeſſing it while awake, ſhall be remarked; as alſo between viſions in ſleep, and viſions while awake, which are called apparitions; ſuch as *Plutarch* tells us *Brutus* and *Dion* had offered to them; whoſe lives upon this account, among others, he compares together; obſerving only the philoſophical conſiſtency, without contending for the reality of ſuch relations. And, laſtly, the *mechanical ſolutions* of this appearance, which the Authors above-mentioned have given, ſhall be examined.

II. It hath been ſhewn before that the ſoul would never ceaſe to exert its activity upon a rightly diſpoſed body; unleſs ſome defect and want of reparation in the body, forced this principle of life and action to deſiſt, and leave the material organ till the indiſpoſition under which it labours be repaired. The circulation therefore, reſpiration, and all the other mechanical motions of the body remaining the ſame, or rather becoming more regular than formerly, by the intermiſſion of ſpontaneous motion; this reparation is begun to be made by the laws of the animal œconomy, and the efficiency of a *ſuperior Power*; and the body remains without motion or ſenſe (*c*). *In this ſtate*, when all is at reſt and ſilent, and

(*c*) Even this ſhews us, that ſenſe and life are not producible from the mechanical motions of the body; otherwiſe they ought to be produced in it neceſſarily in ſleep, as at other times; and more regularly then, being conſtant and mechanical as their cauſe, and proportionally perfect with it. Indeed I think ſleep would be an *impoſſible appearance*, if the regular motions of the animal œconomy were productive of ſenſe and life. But ſee the Note (*b*) N° 15. of the laſt, *That the ſoul cannot be the reſult of an individual diſpoſition of matter; nor therefore of a right diſpoſition; nor therefore*, à fortiori, *of a wrong diſpoſition; nor therefore, at laſt, of any diſpoſition*; as alſo the Note at (*f*) N° 17. concerning the notion of a power *not permanent and inherent in any ſubject, but conſtantly generated, conſtantly dying, exiſting by momentary parts*, &c. *Lucretius*

and the impreſſions on the ſenſory deſignedly ſealed up from the view of the mind; it is eaſy, as has been obſerved (N° 13. of the laſt) to make new and foreign impreſſions on the ſenſory; nothing elſe acting upon it at the ſame time. And theſe impreſſions *muſt be perceived*; for the ſoul is ſtill active and percipient; and its perceptivity is now no other way ſolicited by any thing external. And the regiſter of former impreſſions being ſealed up from its view, theſe new impreſſions muſt be perceived *without memory of what hath paſſed before:* and therefore they muſt be perceived *as cauſed by real external objects*, ſuch as uſually make impreſſions upon the ſenſory. This ſeems the *rationale* of the phænomenon in general, as has been already remarked (*d*); and according to this, we find ſuch impreſſions are really made, and perceived *with ſuch qualifica-*

Lucretius himſelf owns that the ſoul doth not ſleep with the body, and that ſleep is not an affection of the whole man, as Mr. *Locke* ſeems to think. He ſays,

Nec ratione aliâ, cum ſomnus membra profudit
Mens animi vigilat; niſi quòd ſimulacra laceſſunt
Hæc eadem noſtros animos, quæ, quem vigilamus
Uſque adeò, certè ut videamur cernere eum, quem
Reddita vitaï jam mors, & terra potita 'ſt.

Lib. 4. ver. 761.

This is remarkable enough in one who aſſerts *material ſouls*. After this, it muſt be in vain, one would think, for *latter Writers* to go about to deny, or diminiſh this appearance; as in many caſes they endeavour to do.

(d) This, if impartially conſidered, ſeems to account naturally and fairly, for the neceſſary want of memory in our ſleep; which is the circumſtance ſceptical men chiefly inſiſt upon, as arguing the greateſt imperfection in the ſoul; though I have ſhewn before the *wiſe* and *neceſſary* end attained, by thus hindering the ſoul to act, either by itſelf, or in conjunction with the body, *in the time of ſleep and reſt*. *Lucretius* himſelf is far from making this an imputation on the ſoul. On the contrary, obſerving that it could never be an argument for him, he employs his whole addreſs to make it appear conſiſtent with a material ſoul. He ſays, immediately after the words laſt cited,

Hoc ideò fieri cogit natura, quòd omnes
Corporis affecti ſenſus per membra quieſcunt,
Nec poſſunt falſum veris convincere rebus.
Præterea meminiſſe jacet, languétque ſopore,
Nec diſſentit, eum mortis, letique potitum
Jam pridem, quem mens vivum ſe cernere credit.

Lib. 4. ver. 767.

Indeed the memory was by all means to be made dependent on a corporeal ſenſory, to reſtrain the activity of the ſoul; that it might not become a *different perſon*, and that the body might have time for reparation.

tions; inſomuch that the ſoul hath little, if any ceſſation, (at leaſt in ſome perſons) from ſuch repreſentations. *A ſet of new objects* is immediately preſented to it, and that ſucceeded by *another*, and that ſtill by *another*, with greater variety and latitude of nature, than what it perceives by the in-let of the ſenſes; for a new creation of things, of different ſpecies, and other natures, really beyond the licence of the *Painter* or the *Poet*'s imagination, is now offered to it, or forced upon it. It muſt be owned this is a ſtrange phænomenon, and appears to be altogether unaccountable. *But it is a real phænomenon*; and, I think, much as I have here repreſented it; and certainly it *muſt have ſome real cauſe*. And it ſeems contrary to reaſon, that the more ſurprizing and ſtrange a phænomenon is, the leſs the cauſe that produces it ſhould be, or the leſs worth enquiring into; though this be the general opinion in the preſent caſe.

III. In order to ſearch out the cauſe and origin of *this appearance*, I ſhall firſt endeavour to ſhew that it is not produced by the ſoul itſelf; however ſome may inſinuate, rather than ſeem quite ignorant, that it is *the ſport of the ſleeping fancy, the extravagance of imagination*, or *ſome ſuch general thing*, which hath no meaning, will not bear an examination, and is in truth contradictory. The ſoul, as hath been ſhewn, is forced to abandon its working on the ſenſory, which is the ſeat of theſe impreſſions, becauſe of the expence of animal ſpirits neceſſary to keep the former impreſſions patent, or to produce new ones. We know by experience, that the fatigue of continuing to do this is intolerable. The animal ſpirits muſt be recruited, and of conſequence the ſenſory muſt be ſhut up, and the ſoul leave off acting upon it: and it is inconſiſtent to think that the ſoul ſhould be forced to ceaſe working upon the ſenſory this minute, and the next minute begin that work again. We are convinced from our own conſciouſneſs in this caſe, that the ſoul muſt finally quit all attempts of this kind, before ſleep can be brought on; and yet it is often engaged in a dream before we are well fallen aſleep; ſo that we may trace back the perceptions of the ſoul *in theſe confines between ſleeping and waking*, but ſhall not find it deſigning to amuſe itſelf, but rather *ſuddenly engaged* in beholding things, it knows not how. The ſoul, it is true, is always active and percipient, or is never without ſome real perception; but it is moſt certain it ceaſes to act and perceive by the body. It might as well employ itſelf in conſtant contemplation in the time of ſleep, and thinking ſomething regular and uſeful, as in theſe odd,

whimſical ſcenes: and yet it hath been ſhewn above, N° 13. of the laſt, that it cannot do this. Nor is the ſoul indulged to act by itſelf, and ſeparately, ſo as to be a *different perſon*, for reaſons there likewiſe given: nor yet would this be *acting by itſelf*, but on the ſenſory. Beſides, it is inconceivable what the ſoul could deſign by theſe extravagancies, always deceiving, and often terrifying itſelf; no one can have a notion of the poſſibility of this. In a word, to contend that the ſoul may ſtill act on the ſenſory, and produce thoſe ſcenes of viſion in it, is to forget what it was that forced it to ſuſpend its acting on this material organ; and to ſuppoſe likewiſe that it would fatigue itſelf *madly*, without any view or purpoſe, when it might rather employ itſelf in ſomething profitable, or at leaſt pleaſant. Theſe reaſons, drawn from what hath been already ſaid, ſeem to ſhew with a great deal of evidence, that the ſoul doth not form, and preſent to itſelf thoſe ſcenes. But to proceed to others.

IV. The actions of the ſoul muſt always be accompanied with a conſciouſneſs that they are produced by it, as being effected by the will. To ſay the ſoul *acts* without *willing* the action, hath been ſhewn in Sect. 4. to be repugnant: and ſince *willing* is one ſpecies of conſciouſneſs, or thinking; not to be *conſcious* of our own *willing*, is not to be *conſcious* of our own *conſciouſneſs*. Conſtant action and conſtant thinking require conſtant willing: but if we could *will* conſtantly, without *knowing* that we *willed*, we might act and think conſtantly without knowing that we acted and thought, and conſciouſneſs would be a contradictory notion. Whence it is not only eaſy to know whether we ourſelves produce an action, or ſome other Being, but impoſſible not to know it. And in the preſent caſe we have ſtill this farther degree of certainty, that the action or effect is not produced by the ſoul, but by ſomething elſe; becauſe it is *forced upon the mind violently*: the mind ſuffers and is made uneaſy by it, and would fain avoid being conſcious of it, if it were in its power.

V. Now common experience aſſures us, that moſt of thoſe repreſentations, which are offered to the ſoul in ſleep, are not only not produced by it, ſince it hath no conſciouſneſs of any act of the *will* to introduce them; but that they are *involuntarily obtruded upon it*. It hears, ſees, and feels objects at that time, not as it would itſelf, but ſuch as they are made appear to it; and is juſt as paſſive in receiving theſe impreſſions, as it would be in receiving the like impreſſions from real external objects, by means

of the ſenſes, when broad awake; ſhewing as much backwardneſs to them, and ſuffering as much from them; awaking ſometimes with trembling, ſweating, and crying; and as much fatigued by night with ſuch viſions, as with labour and toil by day. I ſay, this is common experience; and there is nothing more ordinary, than to be made to fancy, immediately after we fall aſleep, that we are placed on ſome dreadful height, or precipice, or in ſome ſlippery dangerous ſtation, where we are in hazard of falling, or are actually *tumbling down.* The apprehenſions from this viſionary danger are as great as they could be from the reality of the thing repreſented; for the danger appears real. We awake with a ſtart, or cry; are glad to find ourſelves in ſafety, and the precipice vaniſhed (*e*). The recovering our waking memory, and the reviving the real impreſſions from external objects, formerly lodged in the brain, diſturbs theſe ſcenes, and ſo brings us back to our former ſtate, and reſcues us from our uneaſineſs (*f*). Inſtances of this kind are as various as frequent: ſometimes we are threatned in ſleep, from *a ſtrange and ugly confluence of waters*; ſometimes from *frightful and mercileſs animals:* ſometimes we are carried

(*e*) *Lucretius* is full in moſt of theſe particulars; and at leaſt doth not diſſemble the circumſtances, nor contradict the experience of mankind. At Ver. 1009. of Lib. 4. he ſays,

Multi depugnant, gemitúſque doloribus edunt;
Et quaſi pantheræ morſu, ſævique leonis
Mandantur, magnis clamoribus omnia complent.
Multi de magnis per ſomnum rebu' loquuntur,
Indicióque ſui facti perſæpe fuere:
Multi mortem obeunt; multi de montibus altis
Se quaſi præcipitent ad terram corpore toto
Exterrentur, & ex ſomno, quaſi mentibu' capti,
Vix ad ſe redeunt, permoti corporis æſtu.

(*f*) Here I may refer to the experience of moſt men, if ever they were ſenſible of greater pleaſure, than ſometimes when they have awakened out of a dream, and found that it was not real. It is indeed in theſe caſes, like awaking from miſery to happineſs, and from death to life. A circumſtance which but ill agrees with the opinion, that the ſoul *forms*, and *preſents* thoſe troubleſome appearances to itſelf. And ſometimes the impreſſions are ſo laſting, and the images ſo lively, that it is with difficulty we can perſuade ourſelves, after we are awakened, that the things we ſaw were not real. The reaſon of this ſeems to be, that the impreſſions are ſo ſtrong, and have ſo thoroughly poſſeſſed the mind with a belief of the reality of the things repreſented, that it is ſome time before they can be worn out, or the mind recover itſelf from the aſtoniſhment it was in.

to

to *deſert and inhoſpitable places* (*g*), or placed in other *diſagreeable*, *ſhocking*, and *unnatural circumſtances*. Now undoubtedly, in theſe and ſuch other inſtances, 'tis abſurd to ſay *the ſoul would lay a plot to frighten itſelf*, and then be fooliſhly in *real terror* with its own deſigns. To make this ſucceed, it ought to be *two diſtinct Beings*, each ignorant of the other's conſciouſneſs and deſigns; and the *whole compounded* ſoul be diverted with the contrivance on the one hand, and yet terrified with the execution of it on the other. Theſe are the moſt common inſtances: there are others vaſtly more ſtrange and ſurprizing, but equally certain: but in them all the ſoul muſt neceſſarily be paſſive and unconcerned in the production; ſince, that it ſhould *act* without deſigning to act, or *deſign to act* without knowing it deſigned, or *know that it deſigned the action*, and yet be terrified at it, is inconceivable.

VI. To this may be added, that many of theſe ſcenes are above the power and workmanſhip of the ſoul itſelf (*b*); ſo that it could not produce

(*g*) *Virgil* ſays of *Dido*,

Agit ipſe furentem
In ſomnis ferus Æneas: ſempérque relinqui
Sola ſibi; ſemper longam incomitata videtur
Ire viam, & Tyrios deſertâ quærere terrâ.

Æneid. lib. 4. ver. 465.

This place hath a beauty, which nothing but the imitating nature could have given it.

(*b*) That cauſe which exhibits the viſion to the ſoul in ſleep, ſeems to have a great power over it *in other reſpects*. Sometimes we are made to think *that we are flying aloft in the air*; ſometimes we are *ſtruck with feebleneſs*, that we cannot fly from an enemy, who ſeems to purſue us. We are *dejected, elevated*, and *affected all manner of ways*, which one would never aſcribe to the ſoul itſelf. This is *touching* it another way than by barely exhibiting of viſion. But that which is moſt ſurprizing ſhall be mentioned toward the end of the ſection.

Some of the circumſtances of our dreams mentioned here, are well obſerved by the moſt natural ſort of Philoſophers; the *Poets*, I mean. *Homer*, ſpeaking of *Hector*'s flying before *Achilles*, and *Achilles* purſuing him, uſes the following compariſon.

Ὡς δ' ἐν ὀνείρῳ οὐ δύναται φεύγοντα διώκειν,
Οὔτ' ἄρ' ὃ τὸν δύναται ὑποφεύγειν, οὐδ' ὃ διώκειν·
Ὡς ὃ τὸν οὐ δύνατο μάρψαι ποσὶ, οὐδ' ὃς ἀλύξαι.

Iliad. χ. ver. 199.

And *Taſſo* after him yet more fully,

Come vede tal' hor torbidi ſogni
Ne' brevi ſonni ſuoi l'Egro, ò l'Inſano,
Pargli, ch' al corſo avidamente agogni

duce them, though it were willing, (for thoſe, who are for material ſouls, and mechanical dreams, will not, I ſuppoſe, allow that it hath greater powers and faculties then, than when awake; and thoſe on the other ſide, who are for exalting the powers of the ſoul at that juncture, cannot expect their aſſertion will be allowed them, unleſs they could bring good proof): but omitting this, I ſhall only name another, and that a very ſatisfying conſideration, which plainly ſhews theſe repreſentations to be the work of Agents diſtinct from the ſoul; namely, That whatever part the ſoul itſelf acts, when theſe things are offered to it, as it always acts ſome part or other, either for its own relief and defence, if the object offered is uneaſy, or appears to have bad deſigns upon it; or if pleaſant and friendly, in concurring and forwarding the effect, ſince it doth not loſe the principle of ſelf-preſervation, or ſelf-love; I ſay, whatever part it acts, *it is conſcious of its own acting, and that this action is of its own willing and production.* And the memory of its acting thus, in reſiſting or concurring, it diſtinctly retains afterward, when awakened. Thus if we dream that we are converſing with any perſon, or doing any thing with them in conſequence of that converſation; we are conſcious enough what ſentences in the converſation we ourſelves ſpeak, and what actions we do: and there is the ſame diſtinction and difference of conſciouſneſs, betwixt *our* words and actions, and *theirs*, as if the whole tranſaction had paſſed between *them* and *us* while we were awake. This ſhews us clearly, I conceive, that the ſoul is not the productive cauſe, in contriving and offering theſe ſcenes firſt to itſelf. Indeed it would be a ſlippery principle to allow, that in ſleep *the ſoul acted both parts, while it were only conſcious that it acted but one:* the notion of conſciouſneſs would be rendered inconſiſtent, as I ſaid juſt now; or the certainty of conſciouſneſs and intuition would, I think, be invalidated: the caſe might be tranſlated to our waking thoughts, and ſomething more urged, than D. *Berkley* hath contended for, (he allows that thoſe ideas, which the ſoul is not conſcious of exciting in itſelf, are excited in it by *ſome other thing*, though not the thing that we

Stender le membra, e che s' affanni in vano,
Che ne' maggiori ſforzi, à' ſuoi beſogni
Non corriſponde il piè ſtanco, e la mano.
Scioglier tal' hor la lingua, e parlar vuole;
Ma non ſeguon la voce, ò le parole.

Cant. 20. Stanz. 105.

imagine)

imagine) and that kind of Scepticiſm called *Egomiſm*, would have a new argument to ſupport it. Let reaſonable men weigh theſe conſiderations (*i*).

Ariſtotle, when he gives a definition of a dream, is very explicit in making it *only extend to what the ſoul is not active in:* and ſince he is on the other ſide of the queſtion, as was ſaid; it cannot be unfair to take his account, and really any conſidering perſon will find it to be very agreeable to nature. He makes the dream only the φαντάσμα, the *appearance*, *viſion*, or *thing repreſented*, ariſing from the motions excited in the ſenſory, or brain (*k*); and explains ſeveral other concomitant circumſtances, that cannot properly be called dreaming: eſpecially this, that during ſuch repreſentations, *the ſoul hath ſome very right notions, and makes true concluſions*, which are not to be included in the viſion, or made a diſtinct faculty from its waking reaſon (*l*): and that it proceeds ſo far in its exactneſs ſometimes, as to be conſcious that the things repreſented to it are but illuſions (*m*); which it ſhould never not do, one would think, if it produced theſe illuſions itſelf. And he diſtinguiſhes the genuine operations of the ſoul itſelf, from what it is merely paſſive in beholding by comparing our ſleeping with our waking ſtate; in which, together with our being paſſive in receiving the impreſſions of external objects through the ſenſes, we are alſo active and buſy in thinking of them (*n*). And certainly in dreaming it is ſo; it is far from being true that the ſoul then is only percipient, excluſive of being active; for it is

(*i*) Theſe conſiderations are ſuggeſted here, becauſe of a doubt ſtarted againſt the argument in this paragraph; of which below.

(*k*) Ἀλλὰ τὸ φαντάσμα τὸ ἀπὸ τῆς κινήσεως τῶν αἰσθημάτων, ὅταν ἐν τῷ καθεύδειν ᾖ, ἢ καθεύδει, τοῦτ' ἔστιν ἐνύπνιον. lib. de inſomniis, cap. 3. He hath taken pains before to diſtinguiſh from the φαντάσμα, all circumſtances that might be miſtaken for it.

(*l*) In the words immediately before theſe laſt cited, having concluded—— Ὥν, δεῖν ἐνύπνιον φατίζειν. He adds, οὐδ' ἔσωι ὅτε ἐν τῷ ὕπνῳ γίνονται ἀληθεῖς ὑπειλαι, παρὰ τὰ φαντάσματα. It would be abſurd, to ſay any thing is the viſion that the ſoul does itſelf, *e. g.* To ſay *I dreamed that I thought* is improper, ſince I really thought what I thought; nor would it be leſs improper to ſay, *I dreamed that I ſaw*, or *that I heard*; for I had really theſe perceptions, though their objects did not exiſt externally.

(*m*) Καὶ ὅτι μὲν, ἡ ὄψις λέγει ὅτι ψεύδεται τὸ ὁράμενον, ὥσπερ ἐγρηγορός· ὅτε δὲ, κατέχεται καὶ ἀκολουθεῖ τῷ φαντάσματι. Ibid. cap. 1.

(*n*) Ἔτι παρὰ τὸ ἐνύπνιον, ἐνοῦσιν ἄλλό τι, καθάπερ (ἐν τῷ ἐγρηγορέναι αἰσθανόμενοί τι· περὶ ὃν γὰρ αἰσθανόμεθα, πολλάκις καὶ διανοούμεθά τι· οὕτω καὶ ἐν τοῖς ὕπνοις, παρὰ τὰ φαντάσματα, ἐνίοτε ἄλλα ἐνοῦσιν· φανείη δ' ἂν τῷ τοῦτο, εἴ τις προσέχοι τὸν νοῦν, καὶ πειρῶτο μνημονεύειν ἀκριβῶς. Ibid.

juſt.

juſt as active, as it would be in like circumſtances, when the perſon is awake. Perhaps it was the conſideration of its being thus buſied then, that hath made ſome men inadvertently aſſert, that it produces every thing ſeen, or heard, in ſleep, unknown to itſelf; having nothing readier to ſay. This was the *Epicurean* ſolution of dreams, as I ſhall have occaſion to obſerve hereafter. But the difference here marked, made *Ariſtotle* reject that account as abſurd; and although *Democritus*'s εἴδωλα avoided this abſurdity, yet he rejects that alſo for other reaſons. And generally they all reject one another's accounts as unſatisfying: whence it appears there is reaſon for rejecting them all. Moreover, if as we go along, we caſt our eyes upon theſe ſeveral particulars obſerved by *Ariſtotle*, and examine well in what the ſoul is only active, we ſhall not find it ſo irrational and inconſiſtent as is generally preſumed. It is very inaccurate, to aſcribe all the wild repreſentations, that are involuntarily forced upon the ſoul, and which, as was ſaid in the laſt Section (N° 10 to 13.) it is under a neceſſity of perceiving, to the ſoul itſelf, and then inſinuate that it owes the perfection of rational thinking to matter. Whereas I think it is more philoſophical to ſay, that if the ſoul were not united to a material ſenſory, where theſe impreſſions are made, it could not have ſuch ſcenes obtruded upon it: and, if its activity were not clogged by the indiſpoſition of matter, ſo as to hinder its bringing its paſt perceptions back to view, (ſee N° 11. and 13. of the laſt) it would be no more liable to be impoſed on then, than at other times.

VII. As theſe repreſentations cannot be effected by the ſoul itſelf, becauſe it is as undeſigning, paſſive, and involuntary, as it could be in ſeeing the ſame diſagreeable objects while awake; ſo they are ſuch as require a living, deſigning, and intelligent cauſe to produce them. Thus when one dreams (ſtill to take a common, or at leaſt, an inſtance no way extraordinary) that a man purſues him with a drawn ſword, and withall threatens him, in words, the ſound of which he plainly hears, and the ſenſe of which he plainly underſtands; it is as impoſſible that theſe impreſſions can be made on the ſenſory, and theſe ideas excited in the ſoul, by any thing but a living intelligent cauſe, as it is that conſciouſneſs and ſpontaneity ſhould belong to any thing but ſuch a cauſe. Here is *deſign*, *life*, *action*; *articulate words importing connected ideas*, and thoſe ideas excited in the ſoul; and all involuntary as to it. ——— And now let a man think cloſely upon this appearance; let him try his invention to

to make out another cause, if he can, consistently with all that is shewn before in these papers. But let him also take this caution along with him, That philosophy doth not hinder him from finding a cause that can do more than produce the effect; though it strictly prohibits him to assign one that cannot do so much: and a free cause doth not always act to the extent of its power; nor will the effect appear so despicable, if narrowly examined. —— The only causes (exclusive of an intelligent cause) that can be named, are either *chance*, or the *mechanism* of the body; since it hath been shewn, that the soul itself is not this cause. But it is scarce to be supposed that any body, understanding the import of those two words, could assert that either of them was the cause of such an appearance. *Chance*, as hath been said, is only a word which we make use of, when we are ignorant of the true cause, whether intelligent or mechanical; as when an effect is produced through a train of causes too long for us to see the beginning of, or where the dependance lies too deep for us to find out. But to suppose chance a *real*, *efficient cause*, or *some positive agent*, subsisting by itself, blind and unintelligent, doing it knows not what, nor how; and yet producing effects, where there is design, and an end proposed, and this end attained by just, natural, and compendious means, is to dress up a contradiction in our own mind, and to give it a name. It is not only to make the cause act above its power; but it is to feign a cause, and give it an imaginary power, where there is none at all (*o*). As to the *mechanism* of the body, or any other mechanical and necessary cause, it is the most incompetent of all others, (See from N° 12. of Sect. 2.) This could never account for the *life*, the *action*, the *variety*, observable in the appearance of dreaming; nay for the *sentiments*, the *reasoning* in many instances. The impressions then would be determined, and invariable, without life and diversity; just the opposites of what they are. The surprizing and really endless diversity, seems designed on purpose to exclude the *fixt*, *unalterable measures of mechanism*: and the design, life, and spontaneity, to exclude any *blind*, or *surd efficient*. If mechanism could produce a consciousness and reasoning, different from that of the soul itself,

(*o*) *Lucian* himself says, —— Ἐιμαρμένη καὶ τύχη ἀνυπόστατα, καὶ κενὰ τῶν πραγμάτων ὀνόματα, ὑπὸ βλακῶν ἀνθρώπων, τῶν φιλοσόφων, ἐπινοηθέντα. Deor. concil. It is true, he joins in ἀρετή, that he may not confess a truth *gratis*.

as is the caſe where we ſeem to converſe with others in ſleep; it might produce the conſciouſneſs and reaſoning in our ſoul: For ſhewing how abſurd this is, how far it would put an end to all rational enquiries whatſoever, I refer not only to the place juſt before named, but to the beginning of the laſt Section. Allow but thus much to the Sceptick, and he will defy all the Philoſophers that ever lived, to eſtabliſh one certain truth in philoſophy, or to infer any higher cauſe of appearances, than what *Lucretius* has aſſigned. And are not men aware *how much they abet the atheiſtical ſcheme by arguing thus?* *Lucretius* was much more clear-ſighted, who was juſtly afraid of this phænomenon. Though *mechaniſm* is now become a *learned word*; is it any more than only one particle of matter's being impelled by another, as they reſiſt each of them a change of their ſtate; and that ſtill by another, until we come to the particle firſt moved? And the oftner the motion is thus communicated, the firſt impreſſed quantity of it neceſſarily becomes the leſs, if it be not kept up to the firſt height by an extraneous power. And how ſtupendous doth the multiplicity of the action of the *firſt Cauſe* appear to be, in conſtantly maintaining the mechaniſm of our bodies!—If matter then cannot keep up mechanical motion in itſelf; can it riſe to perfection infinitely excelling that, both in degree and kind? If it were matter that ſpoke the threatning words in the preſent inſtance, and performed the conſequent threatning geſtures; that is, if it made thoſe impreſſions on the ſenſory that excite theſe appearances in the ſoul, would he be much in the wrong, who ſhould ſay, matter thought and reaſoned? I rather think he would not. If we ſhould either ſuppoſe that the *ſenſory* makes theſe impreſſions on itſelf, or that the *animal ſpirits* combine to impinge on it in ſuch order, or that the *blood*, as it circulates, ſtops, or accelerates itſelf ſo, as to perform all this; or laſtly, that *theſe ſeveral things* conſpire together to mimick life and ſpontaneous motion; in all theſe ſuppoſitions, every thing is *inconceivable*, *abſurd*, *impoſſible*. It was obſerved before, that if the mechaniſm *were ſimple*, we ſhould expect no great things from it; but if it be very complicated, we think it not impoſſible for it to become a *power* to itſelf: and yet this is a grievous prejudice, for all the reaſon is on the contrary ſide. A complicated piece of mechaniſm wants, if poſſible, *a power* more, as more of the impreſſed motion is conſtantly conſumed. And after this it can ill be alledged, that mechaniſm is the cauſe of the preſent appearance. And if it cannot be the effect of a cauſe working mechanically;

mechanically; it follows that it muſt be produced by a *living, intelligent Cauſe:* as was aſſerted (*p*).

VIII. We may alſo be ſatisfied, that it is ſuch a cauſe from this conſideration, that if a real man, whom every one allows to be a living, intelligent cauſe, ſuch as is repreſented to us in our ſleep, purſued us while awake, with ſuch a weapon in his hand and uttering ſuch threatning words; the

(*p*) I beg leave, before I proceed, to take notice here of a difficulty in my way, and the rather, as it proceeds on a common prejudice, which men are but too apt to dwell on, and take only a curſory glance of what is ſaid againſt them. It is aſked, "May not a peccant or "redundant fluid in the body, be the occaſion of the ſoul's exerting its operations in an irre-"gular or diſagreeable manner? And may not the want of what is neceſſary for our ſuſtenance "occaſion the ſoul's raiſing deluſory ſcenes in the imagination? May not a hungry man "dream that he eats at a full table, or a thirſty man that he drinks plentifully, without the "active interpoſition of ſome ſeparate ſpirit?" ——— A fluid, whether peccant or regular, is only a multitude of ſluggiſh, inert particles, that cannot move themſelves, or, if moved, cannot change their direction; but equally reſiſt a change of ſtate as well in motion, as in reſt. Therefore the leaſt approach to ſpontaneity cannot be expected from them. This ſeems deciſive. *Peccancy* is but a *defect*; if a right diſpoſition of dead particles can do nothing ariſing to life and action, a *wrong diſpoſition* can much leſs do it. (See the Note (*b*) in the laſt.) That the peccancy of a fluid may be the occaſion of the ſoul's exerting its operations, in an irregular or diſagreeable manner, is an equivocal way of ſpeaking. It may be an impediment or *hindrance* to the ſoul to exert its operations regularly; but it cannot be the occaſion that the ſoul ſhould act *without knowing that it acts*; ſhould form a living ſpectre to fright and terrify itſelf; ſhould pronounce words, and think another pronounced them; in ſhort, *ſhould not be conſcious of its own conſciouſneſs*. The *blood*, the *ſerum*, the *brain*, the *ſenſory*, &c. are all but dead matter: we have ſeen that it requires the conſtant action of an immaterial power, to move them mechanically, and to keep up that motion in them. If theſe fluids, or fixt parts, could perform any thing above mechaniſm, or be the cauſe of the preſent appearance; would not the ſame reaſon, that obliged us to allow the *mechanical power*, oblige us alſo to allow *another* ſpontaneous *power?* If this was a juſt inference in a like caſe above (Sect. 2.) it cannot be wrong here. There is the ſame reaſon for rejecting the living powers of dead matter, with reſpect to the fluids, or fixt parts of the body, as with reſpect to other matter. How unwillingly we quit a prejudice of an old ſtanding! and yet, I think, it muſt be parted with. A plant doth not grow, a ſtone fall downward, without a *foreign impulſe:* can matter then ſport and divert itſelf, mimick all the appearances of life and reaſon, while we ſleep, as *Lucretius* ſuppoſes? Or can it lay the ſoul under an enchantment, ſo that it ſhould perform a thouſand tricks and gambols, ſurprizing in all reſpects; and ſtill think another cauſe performs all? *To be not conſcious of its own conſciouſneſs*, is an undeniable contradiction; it is *to have and not to have* conſciouſneſs at the ſame time. Is not this a firm enough principle to build the concluſion upon, That the ſoul is not productive of what is obtruded upon it? It is ſufficiently conſcious of *reſiſting*, inſtead of *forwarding* what is thus forced upon it; leſt we ſhould ſay, that it may forget what paſſes at that time.———

the ſame, and no other impreſſions, would be made on the ſenſory, and the ſame ideas excited in the ſoul, as by this viſionary perſon in the dream. So that we muſt either deny the man, who purſues us while awake, to be a living intelligent cauſe; or allow the cauſe which excites the ſame ideas in our ſoul while we ſleep, to be, at leaſt, equally living and intelligent. For though the ſame effect may be produced by different cauſes; yet, *the effect being the ſame*, the cauſes muſt be equally powerful and perfect in the production of it, whatever inequality may be between them upon other accounts. If this be not ſo, where can we ſtop in doubting or denying?

IX. If

But this, it is ſaid, *is a low occupation for ſeparate ſpirits to be concerned in.* But if they do perform this, who can help it? What if this be but a *prejudice* of ours? Hath not every the moſt deſpicable *reptile*, *inſect*, *animalcule*, an immaterial ſoul joined to it? Is not this as low an occupation, to be confined to move *theſe atoms?* What if it be an occupation that requires the exertion of *much power* and *knowledge?* Or is there a ſcarcity of living immaterial Beings? Have we any other thing to prove this, than our own ſuppoſitions? Why ſo much *dead matter*, without *living immaterial ſubſtances* in proportion? Or are they all of equal dignity, equally highly employed? Who told us ſo? We ſhould perhaps find out other buſineſs for living Beings? But we are not the contrivers in this affair, but the God of nature. Is there a neceſſity of intereſting ſeparate ſpirits in every frivolous trifling ſcene that is offered to the ſoul in ſleep? Why not! Every ſcene, how frivolous and trifling ſoever, is a *real phænomenon* in nature, and muſt be produced by *ſome adequate cauſe.* Philoſophy doth not regard how far appearances deviate from our rules; but conſiders them as they are. The neceſſity is, that we muſt aſcribe this effect to *a cauſe that hath power to produce it*, or to *dead matter*, which we are ſure hath no ſuch power at all. Let any one chuſe. This concluſion is a *conſequence* of the *inactivity* of matter. Take a parallel inſtance. Gravity is a conſtant immaterial impulſe exerted upon all matter fluid as well as ſolid. What ſo *trifling*, *frivolous*, *unregarded* a phænomenon is there in nature, as the irregular motions and ſurface of running water, or of the ſea waves? But let philoſophy account for this, without the *conſtant action* of the *very firſt* and *higheſt* Being. It ill becomes us to ſet ſo high a value upon thoſe Beings, when the power of the higheſt Being is ſubſervient to thoſe offices in the animal œconomy which we think vileſt. Or are we afraid of renouncing altogether the *active powers* of inactive matter; or of acknowledging too much life and power in nature? I am ſure we ſhall never free our philoſophy from abſurdity, till we have rectified our notions in this reſpect. Let us reflect that *bare ſpontaneity* of motion is an appearance, that makes us allow an *immaterial mover* in creatures that have not the leaſt veſtige of reaſon in their actions. Purſue this hint. Every one will allow an extraordinary cauſe of ſome certain dreams that are monitory, or ſignificant of ſome future event. This is right; if theſe inſtances are well vouched; but, I think, this is not ſo much the buſineſs of *natural philoſophy*; at leaſt *it is not the deſign of* this Eſſay. However thoſe who come thus far (and even *Hobbes* comes thus far, *Ariſtotle* further) have got over all that is difficult; ſince they allow what is contended for, *in ſome caſes*, and *at ſome times.* And what is *ordinary*, can as little want a ſufficient cauſe, as what is *rare.* I own, I know nothing

IX. If we ſhould ſee, while awake, the picture of a man holding a drawn ſword, in a piece of arras, we ſhould conclude, without the neceſſity of arguments to compel us, that this was the work of *ſome Artiſt*, ſome *living, intelligent cauſe*, that knew how to work after his own idea, or at leaſt after a copy ſet him. And if we ſaw farther a ſentence woven, as proceeding out of the mouth of this picture, and were ſure that it were of

thing concerning the conditions and circumſtances of theſe ſeparate Agents; and I contend for no *hypotheſis*. Every one may make an hypotheſis for himſelf. Some have been made for time immemorial: men may chuſe of theſe what pleaſes them beſt. I only contend for the agency of ſeparate living Agents in the preſent phænomenon, in oppoſition to the powers of matter and mechaniſm; ſince the ſoul itſelf in many caſes could not, and in others certainly doth not exhibit theſe ſcenes to itſelf; and of conſequence I infer that ſuch Agents muſt exiſt. And this by the ſame kind of argument, that I infer, from the appearance of gravity, that a Being muſt exiſt to give that conſtant impreſſion to matter.

I cannot agree that the want of ſuſtenance, or any other want, ſhould be the occaſion of the ſoul's raiſing deluſory ſcenes in the imagination; though it may be the occaſion of another Being's doing this. The *imagination*, if it be taken as diſtinct from the power of the ſoul itſelf, muſt be the ſenſory where impreſſions are made. That the ſoul ſhould make impreſſions here, to delude itſelf, is not to be conceived. If *imagination* be taken as ſomething belonging to the ſoul; it is its own *active power* of voluntarily joining ideas together, without objects *ab extra* to cauſe them. That it ſhould couple together ideas by this active power, without being conſcious of its own workmanſhip, is as little to be conceived; and *if it were conſcious of this*, the ſcene would not appear offered to it as real. In the example of *eating* or *drinking*, we are to diſtinguiſh with *Ariſtotle*, what the ſoul itſelf doth, from the φαντάσμα, or *ſcene exhibited*. The ſoul as much exerts an act of the will, to eat or drink, as it does at another time; and unleſs it thought the meat and drink were real, it would not exert this act of the will. This part then of exhibiting the appearance of real meat and drink to it, is the phantaſm, nothing of its own production. But this is always accompanied with other *circumſtances* of *perſons*, *actions*, &c. that make the thing plainer. We do not dream that we ſimply eat and drink, without the circumſtances of time, place, company [at a full table, it is ſaid in the objection.] A late excellent Author hath well obſerved, that the ſoul would be much diſtreſſed, if it dreamed that it were always ſolitary and lonely in ſleep. *Dido*'s being alone in her laſt viſions was an aggravation of the uneaſineſs. Motion then, life, action, perſons, are not the effects of mechaniſm. And though in this inſtance the ſoul doth not reſiſt, but concurs in the repreſentation (which, I ſuppoſe, is the main ground of thinking it the productive cauſe of the whole) ſo that the argument in N° 5. will not be applicable; yet there is the ſame difference and diſtinction of conſciouſneſs, betwixt what the ſoul itſelf doth, and what the perſons in the viſion ſeem to do, as between the Objectors raiſing the preſent ſcruple, and my endeavouring to ſolve it. Whence the argument in N° 6. comes up to it. The notion of conſciouſneſs would otherwiſe be confounded; and the evidence drawn from it, weakened.

the Artiſt's own deſign and compoſure; we could not help concluding that he underſtood that language. But if it were poſſible for him to make his picture *move*; give it *life* and *action*; and make it *pronounce* this ſentence audibly, as if the Artiſt himſelf had pronounced it; or it may be more ſentences than one; and if he could ſo contrive it, that the *motions*, *countenance*, and *theſe words* of the picture, ſhould all *concur* to one uniform purpoſe and deſign, ſo as naturally to repreſent the actions, words, *&c.* of a living man; we ſhould then not only conclude that the contriver of this was a living intelligent cauſe, but highly admire his art and skill, as far ſurpaſſing any thing we ourſelves could pretend to; if not ſuſpect that ſomething of a ſupernatural power had aſſiſted him. Nor would it leſſen the wonder of this performance, or be a reaſon to deny the knowledge and invention of the contriver, though ſome unthinking Peaſant beheld it with as much indifference, as if there were nothing remarkable in it. This inſtance nearly enough reſembles the caſe in hand, the ſcene of viſion in our ſleep. But becauſe ſuch appearances are frequent, we let them paſs unheeded: though the intelligence, and power of the cauſe that produces them, is not the leſs, whether we conſider them, or ſuffer them to paſs without reflexion. Things that are too much above our reach, and ordinary way of thinking, generally paſs as little regarded by us, as things that are trifling: witneſs the *wonderful power* of the Deity, conſtantly exerted through the material univerſe; the *viciſſitude* of night and day, *&c.* An object, to engage our attention, muſt have ſomething of our own *littleneſs* in it. And yet, which is remarkable, the generality of mankind have been led to the true cauſe of the phænomenon we have been conſidering, by hearkning to natural and unbiaſſed ſenſe; while learning and philoſophy have made others miſtake it altogether; ſome without heſitation aſſerting contradictions, and others not gain-ſaying them. To refine in a plain caſe, is to miſapply learning. *Atheiſm* could never otherwiſe have commenced. As has been ſaid in a like caſe before, when ſpeaking of a ſtone's falling down to the earth; if a man dreamt only but once a year, how much more would the rare phænomenon be attended to? The night would be expected with impatience, and all the circumſtances marked with care. With how much more ſolicitude, may we think, do thoſe, upon whom the ſun riſes after ſome months abſence, expect that *glorious ſight*, than we upon whom it riſes once in four and twenty hours, who neither regard the riſing nor ſetting of it? But is there any reaſon for this?

X. The inſtance above, of a man with a drawn ſword, *&c.* which I have here pitched upon, and argued from, is plain and ſimple, and hath nothing in it extraordinary. Whereas almoſt every man's own experience will ſuggeſt to him, or his future obſervation will ſoon furniſh him with examples, of ſeeing in his ſleep more variety of circumſtances, and a longer ſeries of action than is here mentioned. And obſervation and experience, with reflexion on the particulars, are that which will beſt *convince:* nor is it eaſy to conceive that any ſhould want thus much experience, when the Authors who maintain mechanical dreams, and material ſouls, give much more ſurprizing inſtances (as will appear below) ſuch as pleading at the bar, fighting, *&c.* though I deſignedly avoided arguing from ſuch examples. But this inſtance before us, ſimple as it is, or though it had been more ſimple; nay though it had happened only to *one man*, and that but *once*; provided we could have been certain that it had happened once, and was fairly related, muſt juſtify all that is inferred from it here, or deſigned to be inferred. An effect, though it be *but once* produced, as certainly infers the exiſtence of the cauſe that produced it, and as neceſſarily concludes that this cauſe muſt have had power, and perfection enough to produce it; as if it had been repeated ever ſo often. For if a contradiction could be *once* effected, by a cauſe's producing an effect above its power, nothing could hinder it from being effected *any number of times*. But as it is, ſuch inſtances are numberleſs, and as different from each other, as the perſons *to whom* they are repreſented, or the times *in which* they are repreſented to the ſame perſon; and it is looked upon as uncommon, if the ſame man hath the ſame repreſentation twice offered to him: a circumſtance that well agrees with the cauſe aſſigned; but no way with mechaniſm, or any other thing that could be named. If therefore we conſider the almoſt *infinite variety* of ſuch ſcenes, which are either offered to the ſoul in ſleep, or violently obtruded upon it; the *ſentiments*, and *reaſon* in many of them, the *ſpontaneity* and *life* in moſt of them, inſomuch that there is ſcarce any production in art or nature, commonly reckoned wonderful, that cannot be parallel'd in ſome one or other of theſe inſtances; not to mention the *deviation from the preſent natures of things*, which muſt ſtill appear more wonderful to us, if we are right judges, as will appear by going on: and if we join all theſe together, we muſt agree, that whatever kind of reaſoning, or argument, ſhews that the works of art are the works of living deſigning Beings; or even that this great

frame

frame of viſible things, is the effect of a *living, intelligent powerful cauſe*, will in ſome degree be applicable to them, to ſhew that the cauſe which produces them, muſt be living and intelligent *(q)*; and that if theſe are not the effects of a cauſe that hath life, knowledge, and contrivance, we muſt for ever loſe the *diſtinction* between the actions of ſuch a cauſe, and of a mechanical, neceſſary cauſe, nor pretend in any other caſe whatſoever, to determine by the effect, of what kind the cauſe is. For, as has been ſaid, allow the Sceptick but thus much, that ſuch an inſtance of life, action, and deſign, is effected by the *temerarious, furd jumble* of dead atoms; and he knows not how to uſe his advantage, if he cannot defy all the men in the world to eſtabliſh upon him the neceſſity of any wiſe and deſigning cauſe in nature. To apply *Galen*'s reaſoning, with reſpect to the contrivance and mechaniſm of the animal body, *to the preſent caſe*; What can be the effect of a cauſe, working with deſign and knowledge, if the *inſtance aſſigned above*, and numberleſs ſuch others, be the effects of blind chance, or mechanical neceſſity? It is impoſſible to anſwer this queſtion in either caſe. For the effects of the *firſt* muſt be of a quite different nature from thoſe of the *laſt:* or, the effects of a living, intelligent cauſe muſt have no marks of deſign and contrivance in them. This is to change the natures of things; or elſe to ſpeak by way of contradiction. What would one conclude (to give another very applicable parallel) if he ſometimes ſaw a *Muſician* play on an inſtrument; and by and by heard the ſame tunes, and even a greater variety of them, played over on the ſame inſtrument, when no *viſible Artiſt* was near? The ſenſory is the *inſtrument*, which is ſometimes moved by the action of external, living objects; and in darkneſs and ſilence, *the ſame way moved*, or with far greater latitude, and compaſs of notes, thoſe objects being all removed. Indeed to exhibit words and ſenſe requires by far the *moſt artificial touch* of muſick; as to exhibit ſcenes of life and real motion, is the *hardeſt kind* of painting.

(q) It is only here meant that this argument is of the ſame nature, and concludes upon the ſame account, as the arguments *à poſteriori*, for a wiſe and powerful cauſe of the viſible effects in the material world; though not of the ſame force and conviction. And yet if it could be ſhewn, that but ſo much as the inſtance here aſſigned, were poſſible to be effected, without a deſigning living cauſe, it is not conceivable that any thing could be a more *convenient* introduction to the fierceſt, the Epicurean Atheiſm. If the principle, that the effect cannot be perfecter than its cauſe, could fail in this appearance of dreams, no man could tell how far it might fail in all the parts of philoſophy. All truth ſtands, or falls together.

XI. This

XI. This is, I think, the genuine and natural ſolution of this appearance; not liable to any abſurdity, or even difficulty, with which other methods of accounting for it are preſſed; as I hope will be made appear. Theſe ſeem to lie on thoſe, who aſcribe *the effects* of life and action to *dead matter*. And for this reaſon it is aſſerted, that there are living Beings exiſting ſeparate from matter; that they act in that ſtate; that they act upon the matter of our bodies, and prompt our ſleeping viſions. Matter, in the philoſophy of many, has uſurped the *power* of the living God, the *power* of the human ſoul, and the *power of all other living and intelligent cauſes*: And if reaſon throws it out in the two firſt caſes; it is hard to ſay, why it ſhould not in the laſt. It is a ſluggiſh, inert ſubſtance in all caſes equally; *inactivity*, and *reſiſtance* to a change of its ſtate, being inſeparable from it. If once we allow of an *infinitely powerful and perfect Author* of the Univerſe, the very *proportion* and *reaſon* of things, would make us vehemently ſuſpect, that there cannot be *ſo much* dead ſubſtance, and *ſo few* living Beings created in it. All from brute-matter to the ſoul of man, is a curious and wonderful ſcale of perfection, riſing by eaſy ſteps; but, certainly, the human ſoul cannot be the perfecteſt living creature; unembodied ſpirits ſhould not, one would think, make a mean part of a rational creation, but rather by much the moſt conſiderable part. It may alſo be ſuppoſed, that the higher orders of theſe Beings may be employed in things proportionable to their nature and perfections; *but not to ſpeak more of that*, the exiſtence of inferior ſpecies is evident, I think, from the preſent phænomenon. This ſeems the natural leſſon we ſhould draw from it; for, as was ſaid, God and Nature do nothing for no end, or for a bad end; only to ſtumble men: its an argument againſt Atheiſm, and the Atheiſt himſelf is terrified at it. Others might have reaſoned on this ſubject from other topicks; and perhaps better: But the theory as in this Eſſay, is a *conſequence* of the inertia of matter, which it would have been improper to have omitted.

XII. In eſtabliſhing this concluſion, *That our dreams are prompted by ſeparate immaterial Beings*, I endeavoured previouſly, or by way of a *lemma*, to ſhew that the φαντάσματα, or what is properly called the viſion, is not the work of the ſoul itſelf. This is thought exceptionable, and not evident enough to ſupport the weight of ſuch a concluſion: Wherefore before I proceed farther, I ſhall endeavour to ſhew the truth of this

principle. It is ſaid, "The ſoul itſelf is the productive cauſe of all that we ſee "in ſleep, and that from the change which happens to the ſeat of memory "during our ſleep, we may remember all the ſcenes of our ſleeping ima- "gination, and yet have no memory of the ſoul's exerting an act of "the *will* to *imagine* thoſe ſcenes; juſt as in ſome diſorders of the "brain, the memory is entirely loſt as to certain paſt actions, and yet "preſerved as to others." But, with ſubmiſſion, there is a great difference in theſe two caſes; ſo that we cannot argue from a parity. After *theſe diſorders* of the brain are over, we do not remember that we acted one part in a conference, and that the other was involuntarily obtruded upon us; the memory only of certain of *our* paſt actions is entirely loſt, as is ſaid: Whereas in dreams we clearly remember a part which *we ourſelves* ſaid or did, and as clearly remember *another different* part, which was forced upon us, or in acting which we had as little concern, as we have when another perſon ſays, or does like things to us while we are awake. And this alternate ſpeaking and replying, or this difference, in *our* producing a part of the action, and *another Agent's* producing another part of it, is continued to ſome length in certain inſtances. Now the particular that I inſiſt upon is, not only *that we do not remember* that we ourſelves acted ſuch a reſponſory or oppoſite part; but *that we remember the contrary.* It is one thing to remember that I ſaid ſo and ſo to another perſon, not remembering the reſt; and quite another to have ſuch a clear diſtinction of memory as in the caſe before us, of what I ſaid to him, and he to me. In the firſt caſe *there is a perfect forgetfulneſs of ſomething*; and in the other, a *perfect remembrance of it* with a contrary circumſtance; (*viz.* that not I myſelf, but another perſon, put the queſtion, or did the action.) I wiſh this were taken notice of. Thus this objection ſuppoſes that the ſoul *forgets*, not only its paſt thoughts, but its *preſent thoughts*, and that at the very time when they are preſent to it; which is a direct contradiction: nay, that it may have a conſciouſneſs that its preſent thoughts (while preſent) may be the thoughts of another Being; which increaſes the contradiction: and becauſe a want of memory of our paſt thoughts is poſſible, it infers that a want of conſciouſneſs of our *preſent thoughts* is alſo poſſible; and farther, that we may be conſcious that our preſent thoughts are not our preſent thoughts, but the thoughts of another perſon. Hence it appears the intended parallel is quite miſapplied, becauſe the ſimple forgetting a thing no way comes up to that clear diſtinction of memory and conſciouſneſs which we have in our dreams.

XIII. All

XIII. All this has been pretty fully expreſſed in the ſixth paragraph above, where I have ſhewn that the ſoul can never be ſaid to produce that which it is conſcious another Agent produces, without ruining and confounding all the evidence of ſelf-conſciouſneſs. But that this point may be the more attended to, I will take a particular example and reaſon familiarly upon it; and I ſhall pitch on ſuch an inſtance as can be liable to no ſuſpicion. It is known that *Cicero* was profeſſedly an Academick; and that he wrote deſignedly in his treatiſe *de Divinatione* againſt this very concluſion which I maintain; and endeavoured to account for the *appearance* of dreaming the ſame way, as is done here in the objection. *Cicero* then being of this *doubting ſect*, and writing on the oppoſite ſide of the queſtion, tells us a dream of his own; which are circumſtances, I think, that muſt free ſuch an *inſtance* from any reaſonable ſuſpicion of *credulity*, or *unfairneſs* in the relation; and I ſhall give it in his own words. He brings in his brother *Quintus* managing the argument on the oppoſite part, and alledging his [*Cicero*'s] dream againſt himſelf, as alſo another of his own [*Quintus*'s.] I ſhall tranſcribe both. *Quintus* after having brought many other examples, ſome of which are remarkable enough; ſays, *Sed quid vetera aut plura quærimus? Sæpe tibi meum narravi: ſæpe ex te ſomnium audivi tuum. Me, cùm Aſiæ provinciæ præeſſem, vidiſſe in quiete, cùm tu equo advectus ad quandam magni fluminis ripam, provectus ſubitò, atque delapſus in flumen, nuſquam apparuiſſes, me contremuiſſe timore perterritum: Tum te repente lætum extitiſſe, eodémque equo adverſam aſcendiſſe ripam, nóſque inter nos eſſe complexos. Facilis conjectura hujus ſomnii; mihíque à peritis in Aſiâ prædictum eſt, fore eos eventus rerum, qui acciderunt.* This is *Quintus*'s dream, which I ſhall not ſtay at preſent to argue from: any one who reads it will ſee the marks of *involuntary repreſentation* in it, or of its being forced upon him; and conſequently which of the ſolutions is moſt applicable to it. *Cicero*'s own dream follows. *Venio nunc ad tuum* (continues *Quintus.*) *Audivi equidem ex teipſo: ſed mihi ſæpius* Salluſtius *noſter narravit; cùm in illâ fugâ, nobis glorioſâ, patriæ calamitoſâ, in villâ quâdam campi Atinatis maneres, magnámque partem noctis vigiláſſes, ad lucem denique arctè, & graviter dormitare cœpiſſe: itaque quamquam iter inſtaret, te tamen ſilentium fieri juſſiſſe, neque eſſe paſſum te excitari: cùm autem experrectus eſſes horâ ſecundâ fere, te ſibi ſomnium narraviſſe: Viſum tibi eſſe, cum in locis ſolis mœſtus errares,* C. Marium *cum faſcibus Laureatis quærere ex te, quid triſtis eſſes? Cúmque tu, te tuâ patriâ vi pulſum eſſe dixiſſes, prehendiſſe eum dex-*

 tram

tram tuam, & bono animo te juſſiſſe eſſe, Lictoríque proximo tradidiſſe, ut te in monumentum ſuum deduceret: & dixiſſe, in eo tibi ſalutem fore. Tum & ſe exclamaſſe Salluſtius *narrat, reditum tibi celerem, & glorioſum paratum, & Teipſum viſum ſomnio delectari. Nam illud mihi ipſi celeriter nuntiatum eſt, ut audiviſſes in monumento Marii de tuo reditu magnificentiſſimum illud* S. C. *eſſe factum, referente optimo & clariſſimo viro, conſule; idque frequentiſſimo theatro, incredibili clamore & plauſu comprobatum: dixiſſe te, nihil illo Atinati ſomnio fieri poſſe divinus.* De Divinat. lib. 1.

XIV. This is *Cicero*'s dream, and as he tells it himſelf; whence it appears his Brother and he had often admired the particularity of it in their private diſcourſes. For *Cicero* was proſecuted by *Clodius*, and forced to leave *Rome* in the forty-ninth year of his age, to which expulſion this dream refers; and he lived fourteen or fifteen years after. And I dare ſay when the thing itſelf happened, and afterward when the conſequence foretold fell out accordingly, he aſcribed it to quite *another cauſe*, than he does now in his *academical Philoſophy*. But to apply the objection above to it. Here he remembers that a queſtion was put to him; namely, *Why he was ſo ſad?* and who put it; and what he himſelf replied, *viz.* That it was *becauſe he had been unjuſtly driven out of his native country.* Now if he had put this queſtion to himſelf, why ſhould he have been made believe that *Marius* put it? Or why ſhould he remember that he made the anſwer *only*; and not only forget that he aſked himſelf the queſtion (as the objection ſuppoſes) but remember it with a quite contrary, nay with an *inconſiſtent* circumſtance; to wit, *That another perſon aſked it*, and not he himſelf, which the objection does not conſider. Or what *powerful Demon* can ſo affect the conſciouſneſs of the ſoul in ſleep, that it ſhall act two different, *and oppoſite* parts; and yet be not only not conſcious of acting the one of them, but conſcious of *not acting it*; or of being paſſive, *often involuntary*, and of another Agent's producing it? This would bring in the *agency of ſpirits*, in as wonderful a manner at leaſt, as that which I contend for. No mechanical cauſe; nothing leſs than a powerful, living, deſigning Being, could make the ſoul *remember* and *forget* ſo rationally, in ſuch order.——A man only forgets what it is proper he ſhould forget, ſo that *two perſons* may be made out of *one Agent!*——I ſeriouſly wonder how men can broach, or maintain ſuch abſurd fancies.——Or laſtly, upon *Cicero*'s own principles, *That the ſoul itſelf produced the whole action*, where had been the divinity of this parti-

cular viſion, which *Quintus* ſays he found in it?——*Dixiſſe te, nihil illo Atinati ſomnio fieri poſſe divinus.*——To ſay *a dream is divine*, is to ſay it has a divine original: and to ſay *nothing could be more divine* is yet a ſtronger aſſertion of ſome divine power exhibited. He ſhould, conſiſtently with his own notions, have inſtantly recollected that there was *nothing new* or *ſurpriſing* here. Which ſhews, as I obſerved juſt now, that the pregnancy of the inſtance, while recent, made him forget his *academical concluſion*. Beſides, *Marius* took him by the hand; bid him be of good courage; ordered one of his Lictors to take care of him and convey him into his own [*Marius*'s] monument; and told him that his preſent troubles ſhould be relieved, and he find ſafety there. Was all this; *the Lictor*; *the taking him by the hand*; *and the exhortation to be of better courage*, only the impoſture of the ſoul itſelf to deceive itſelf? If at this rate we make but *one perſon* of *two*, there is no reaſon why we may not contrarily make *two* out of one, and pretend that whatever we do while awake, may ſtill be done by one or more different Agents. And thus, as I ſaid before, (N° 6. and 13.) this aſſertion, *That the ſoul itſelf may produce what it thinks (or is conſcious that) another Agent produces in ſleep*, deſtroys the *evidence* of ſelf-conſciouſneſs, which is the ſureſt and moſt intuitive foundation of all our knowledge; or rather it takes away *ſelf-conſciouſneſs* altogether, and leaves no diſtinction between *our own conſciouſneſs* and that of *another perſon*.——I think *another perſon* ſpeaks or acts ſo and ſo; yet it is really *I myſelf* who ſpeak and act.——Contrarily therefore, I think *I myſelf* ſay or do ſuch a thing; yet it may be *another perſon*. Thus we muſt not looſen the foundations of this evidence of ſelf-conſciouſneſs in one caſe, and then confine the conſequence of it to that caſe only: The contagion will ſpread; and the event will be putting a rod into another man's hand to chaſtiſe ourſelves. If my conſciouſneſs of writing this at preſent, is not enough to aſcertain it mine; my *not-conſciouſneſs* of doing what I ſee another perſon do, is not enough to aſcertain it *not mine*. Let the *Academick* ſee where this will end. I know the *modern Academick* hath learned to doubt, [or to pretend to doubt] whether the *EGO* of this preſent time, be the ſame with the *EGO* of any paſt or future time (ſee my Lord *Shaftsbury*'s *Characteriſticks*): But the opinion aſſerted in the preſent objection goes farther, and would pretend to ſhew that the *EGO* and the *TU* of the preſent time, may both be but *one* and the *ſame perſon*. Thus *Des Cartes*'s *principle*, *Cogito, ergo ſum*, may no longer be true; for while I fancy *I think*, it may be *ſome other thing* that thinks, while I am not ſo

much as exiſting. And all theſe are no more than the genuine conſequences of ſuppoſing *that the ſoul may act and ſay in ſleep, what it thinks another Being acts and ſays at that time:* Whence the certainty of the contrary principle, eſtabliſhed in N° 6. is fully evident.

XV. But what does *Cicero* anſwer to this particular inſtance? *Mihi* (ſays he) *temporibus illis multùm in animo Marius verſabatur, recordanti, quàm ille gravem ſuum caſum magno animo, quàm conſtanti tuliſſet. Hanc credo cauſam de illo ſomniandi fuiſſe.* De Divinat. lib. 2. What a poor unſatisfying ſhift is this! Had he not *Camillus* and *Scipio Africanus* alſo in his mind? Why not have dreamed of theſe? eſpecially ſince there was a greater affinity between his baniſhment and theirs, than between his and *Marius*'s, who had but what he deſerved; for they bore their exile with much more conſtancy and greatneſs of mind than he did. But allowing he had thought of no other baniſhed *Roman* but *Marius*, was *this thinking* of *Marius* enough to have put words in *Marius*'s mouth? to have given him *life* and *action?* to have given him ſuch particular action; ſuch particular words? A thouſand different kinds of action, and a thouſand other forms of ſpeech might have been imagined, all as appoſite to the purpoſe, as thoſe he uſed. And muſt there not be a *determining cauſe* aſſigned, which out of ſuch a variety pitched on what was ſo odd? I would have this *determining cauſe* a little more thought of, and not paſſed over ſo lightly. Indeed *chance* is the *determining cauſe* in the greateſt part of our philoſophy; and with the aſſiſtance of that *we make any thing do any thing.* But what if he had not thought on *Marius* at all, and yet had dreamed of him? for this is a very common circumſtance in our dreams. What then would have become of his *hanc credo fuiſſe cauſam?* I cannot help making a reflection here, *that the Academick, (either ancient or modern) is often to be pitied, who by his principles, and to maintain the credit of never being convinced, is obliged to diſpute againſt every thing, even the plaineſt truths. This is a drudgery one would not be bound to undergo, and muſt of courſe make the Academick often abſurd, and ſometimes perfectly ridiculous.*

XVI. As to the prophetical or monitory nature of this particular Dream, I have nothing to do with it; that lies at *Cicero*'s own door, who relates it as having happened to himſelf. (For it is he that puts theſe words in his Brother's mouth——*Nam illud mibi ipſi ecleriter nuntiatum eſt, ut audiviſſes in monumento Marii de tuo reditu magnificentiſſimum*

illud S. C. &c.) . Though I am far from thinking ſuch inſtances impoſſible. But ſhould he not have ſaid ſomething in order to have accounted for this wonderful circumſtance of it? He gives us a very ſingular inſtance from his own experience, that a thing was foretold to him in his ſleep, which came to paſs as it had been foretold; and upon reflection owns *That nothing could be more a proof of ſomething divine:* and yet after all ſays *there was nothing more in it than that he was thinking on a certain perſon the day before.* Was that enough to give this perſon a prophetical virtue? Or to endue his own ſoul with a prophetical virtue? Which ſoever of the two he ſays, provided he relates his own dream fairly, there ſeems to be no leſs a cauſe concerned in it, than that I contend for. If a man's own ſpirit is ſometimes enabled to foreſee things to come, I do not ſee how it can be affirmed to be the cauſe of ſuch a viſion; ſuppoſing it produced all the reſt. And if it cannot produce ſuch a viſion when the event follows; why ſhould it produce the ſame, or a like viſion, though the event ſhould not follow. The event's following or its not following, hath no connexion with the phyſical cauſe of the viſion; which therefore ſhould be the ſame in both caſes. I am ſure the aſſigning any leſs cauſe, than I have mentioned, infers that which would utterly confound all knowledge, and put an end to all future enquiry; *viz.* That the effect may be every way more perfect than the cauſe that produced it; of which I have ſaid enough before. He ſays, *many dreams are not monitory*; this indeed is, I think, as it ſhould be, the cauſe of them being conſidered; and *that in a long life he had only this one dream*——*Mihi quidem præter hoc Marianum, nihil ſanè quod meminerim. Fruſtra igitur conſumptæ tot noctes tam longâ in ætate.* Ibid.——What follows? Can a thing that only happens once, be without a cauſe? or without an adequate cauſe? He ſays of *Democritus*, upon his accounting for our dreams by *ſimulacra* (of which below) *Nec cognovi quemquam qui majori auctoritate nihil diceret.* Ibid. Others will determine how far this is applicable to himſelf; but if what he ſays of his only having had this one dream be true; *Plutarch* in his life, and *Suetonius* in that of *Auguſtus*, makes him contrive a refined piece of flattery to make his court to *Julius Cæſar*, in telling a fictitious dream of his own concerning *Auguſtus*, then but a young unknown ſtripling.——*M. Cicero C. Cæſarem in Capitolium proſecutus, ſomnium priſtinæ noctis familiaribus forte narrabat: puerum facie liberali demiſſum cælo, &c.* Sueton. in Auguſt. *cap.* 94. *Plutarch* tells this dream ſtill more circumſtantially, with the conſequences that followed upon it. But whether

whether *Cicero* had really forgot this remarkable dream; or diſſembles it now, in his diſpute; or whether theſe *Writers* unjuſtly father it upon him, I cannot ſay: But it is certain theſe Books *de Divinatione* were written after the death of *Julius Cæſar*; that is, after the time he is ſaid to have had this *ſtrange dream* concerning *Auguſtus*.

XVII. There is another argument I mentioned before, againſt this notion that the ſoul contrives, and preſents to itſelf all thoſe things we think we hear, and ſee done in dreams; to wit, *That it could not impoſe on itſelf by this method.* This I ſhall explain a little, and ſhew a farther reaſon why it is impoſſible: which is, That in the inſtance above, and others of the like nature, *it is neceſſary that the perſon's ſoul who dreams, (if it contrived and preſented all to itſelf) ſhould ſtill be buſy in forming and producing the parts of the viſion all along as they ſucceed to each other:* juſt as a man, when he contrives a fable *extempore*, has his invention at work all the while, which certainly muſt hinder him from taking it for a true narration told by another, in which he has no other ſhare but giving attention to what he hears, or beholding what is done in his preſence. In ſhort, it would not be enough for the ſoul *to make the diſpoſition* in the beginning of the repreſentation, and order *once for all*, ſuch and ſuch a ſcene, which ſhould afterwards come in view ſucceſſively, and of itſelf. It is a childiſh inattention to make ſuch a ſuppoſition: the ſoul muſt all along form the tranſient and ſucceſſive parts of the repreſentation; as when a man repeats a ſpeech, he muſt repeat it to the laſt word; or if he mimicks another man's action, he muſt perſonate him to the laſt geſture. It is therefore neither to be ſuppoſed, that the ſoul ſhould *forget this its own conſtant action*, which muſt continue all the time of the dream; nor that it could impoſe on itſelf, while thus conſtantly employed: and much leſs could it terrify itſelf in good earneſt, as at the preſence of real danger. —— *Méque contremuiſſe* (ſays *Quintus*) *timore perterritum.* —— Would it not be a ſtrange fancy, that a Poet might contrive a *Drama*, which ſhould have a ſpontaneous power to exhibit itſelf in order, while he were ignorant of the whole contrivance, and imagined he had no other hand in it but as an idle ſpectator? This ſeems to be big with contradiction. And yet in effect the objection contains in it a no leſs abſurd ſuppoſition. For if the ſoul by one ſimple act of the will, ſhould produce a *ſeries* of ſucceſſive action; the things ſeen and heard would be what we might call *automata*, or have life and ſpontaneity of themſelves. So neceſſary is it to admit of a living active principle here, that while we deny it,

it, we are forced to ſuppoſe things lifeleſs and inanimate, to have ſpontaneity and life. This is remarkably verified in *Lucretius*'s account of dreams to be examined hereafter. And if we ſay that the ſoul itſelf continues to invent and contrive the parts of the viſion, as they conſtantly ſucceed each other; it is impoſſible it ſhould not be conſcious of this its conſtant invention; or forget it, as if it were but *one tranſient act*. There is not a more painful act of the mind than *invention*, even while we are awake; as a late ingenious Author hath well obſerved: and it is certain that ſleep *binders* and *deadens* the active power of the ſoul. Therefore, if it be a contradiction that the ſoul ſhould exert this painful and laborious operation, while we are awake, and yet know nothing of it: it muſt be more impoſſible that it ſhould perform this in ſleep, with ſuch eaſe, as to take all for the work of another being, as the ſame Writer ſuppoſes [*Spectator* 487.] This is to make a prodigious wide leap in reaſoning, from one extreme to another; firſt to own the difficulty, and then to aſſert the great facility, though in more diſadvantageous circumſtances.

XVIII. There is ſtill another circumſtance which plainly ſhews, that the ſoul cannot contrive thoſe things for itſelf which we ſee and hear in dreams; *viz.* That it could not impoſe on itſelf as a *reality* then, what muſt appear an *impoſſibility* to it at all other times: and this is a quality attending many repreſentations offered to the ſoul in ſleep. It is in this reſpect our dreams are ſaid to be *chimerical* and wild. And if this obſervation be juſt; *the very inconſiſtency and wildneſs of our dreams agrees leaſt with the ſuppoſition made in the objection. Alexander the Great* had a very remarkable dream of this kind, when his friend *Ptolemy* was wounded with a poiſoned dart; namely, That a ſerpent came to him with a root, or herb in its mouth; and told him where the herb might be found, what its vertues were, and that it would ſave the life of his friend, *&c.* as is related by moſt Hiſtorians in the life of that Prince. *Cicero* himſelf, in the place beforementioned, takes notice of this dream, and allows it might have been ſuch as narrated, (which is ſtrange enough, for I am ſure it by no means agrees with his ſolution) and wonders that his brother *Quintus* did not urge ſuch a *ſingular inſtance*. Now it would ſhock us to hear at any other time, and while we are awake, that a ſerpent ſhould ſpeak, and that too while it held a root in its mouth. *Cicero* takes notice of this very *impoſſibility*, and yet owns that it might have appeared a *reality* to *Alexander*. But how could it, if *Alexander*'s ſoul invented this abſurd

fancy

fancy to itſelf? Any one who conſiders will never affirm it. It is plain *Alexander*'s ſoul muſt have coupled together theſe ideas, by the ſame power of imagination that a painter employs, when he paints a *Harpy*, or a *Centaur:* and therefore he could no more have been perſuaded that this was a real ſerpent ſpeaking to him, than a painter could think in good earneſt, that the picture he had drawn was a living creature. I do not mention here the importance of what the ſerpent told *Alexander*, (let thoſe who give the narration anſwer for that;) but inſiſt only upon the circumſtance that a ſerpent ſhould appear to ſpeak to us in a dream, which certainly is no very incredible thing. *Cicero* thinks he has accounted well enough for this when he ſays, *Non enim audivit ille draconem loquentem, ſed viſus eſt audire, & quidem quò majus ſit, cùm radicem ore teneret, locutus eſt*; and adds, *Sed nihil eſt magnum ſomnianti.* But was it not enough that the ſerpent ſeemed really to ſpeak, though it did not really ſpeak? There is no difference between *viſus eſt audire* and *audivit*, as to the reality of the perception; as every one will allow. And that being ſo, the difficulty I inſiſt upon is obvious: for the ſoul *really perceives* in dreams what muſt appear impoſſible to it at all other times. And this itſelf would be impoſſible, if the ſoul formed ſuch chimæra's to itſelf by its own power. When he adds, *Sed nihil eſt magnum ſomnianti*, it is, I think, as if he had ſaid, "But after all, the objects ſeen in dreams are ſo ſtrange, that there "is no accounting for them this way." Or it is tacitly owning that the ſolution doth not remove the difficulty of the thing pretended to be accounted for; as if I ſhould ſay, It is very common to ſee things in dreams, which are above the energy of the ſoul itſelf, or the powers of motion and matter; for, *nihil eſt magnum ſomnianti.*

XIX. I ſhall leave *Cicero*'s account of dreams, after obſerving that the motive, which ſeemed to hinder him from owning that ſeparate, intelligent Beings excited our viſions in ſleep, and which is ſtill a motive with moſt men, is not juſtifiable in good philoſophy; it is this, That men would grow idly and fooliſhly ſuperſtitious, and fearful of *ſuperior powers.* He ſays, ſpeaking ſtill of that dream about *Marius*, *Omnium ſomniorum, Quinte, una ratio eſt, quæ, per deos immortaleis, videamus ne noſtrâ ſuperſtitione & depravatione ſuperetur.* What! *Omnium ſomniorum?* This *beſeeching*, without offering reaſons for what he maintains, looks like begging. That men would not argue from ſuch inſtances as he owns to have happened to himſelf, for fear of certain conſequences; That they would not be too difficult

difficult to be perſuaded, but *wink*, and turn away their eyes at proper places. To ſearch after, or find out the true cauſe of any natural appearance, needs make no man ſuperſtitious, or fearful of ſuperior powers, who hath no other reaſon to be afraid: and if I have another reaſon to be afraid, what will it avail me to turn Sceptick with reſpect to the exiſtence of ſeparate, inviſible Beings? If this conclude any thing, it concludes that I ſhould turn Atheiſt altogether. And I find this Author ſaying elſewhere: *Quis enim poteſt, cùm exiſtimet à Deo ſe curari, non & dies & noctes Divinum Numen horrere? Et, ſi quid adverſi acciderit (quod cui non accidit?) extimeſcere, ne id jure evenerit.* Academic. Quæſt. lib. 4. Thus we ſee this guilty fear drives men to hate that, which ſhould be the only comfort of all *reaſonable creatures*; to wit, that a Deity of infinite reaſon and perfection ſhould govern the world. And one might carry this unpleaſing remark ſtill higher. For *Cicero* ſays in the words immediately before, that *Strato* relieved him from *much terror*, when he taught that *God neither made, nor took care of the world; but that ſurd matter did all that was done.* It is true, a little after he endeavours to bring himſelf off, by the *great academical principle*, ſaying, "he neither aſſented to *Strato*, "*who denied a God*; nor to *Lucullus*, *who aſſerted one.*". But this ſeems ſomewhat contradictory to *his being relieved of his fears.* In ſhort, nothing ſhould influence our ſearches after truth, but the love of truth itſelf. *Truth can have no ill conſequences, but by our own fault*; which, methinks, ſhould take off the argument againſt ſearching out an adequate cauſe of the preſent phænomenon of dreams, from a fear leſt ſuperſtition ſhould prevail: ſince that can be no argument in *reaſon*, whatever it may be in *policy*, or on ſome other conſideration. If we are not to enquire whether there be a variety of immaterial ſeparate Beings in God's creation, as there is of organized bodies in the material world, leſt ſome men ſhould turn fanciful and ſuperſtitious; by a parity of reaſon, we are not to enquire whether a Being of infinite reaſon manages the Univerſe, leſt unreaſonable men ſhould hate him, as being againſt their intereſts; as *Cicero* allows they will. "Men would "be eaſier, (ſays a certain great Author) if they were aſſured that they "had only *mere chance* to truſt to." And again, "No body trembles "to think there ſhould be no God, but rather that there ſhould be one." But I hope he is miſtaken: and I am ſure *they* apoſtatize from the intereſts of reaſon, and a rational nature, who had rather truſt to *blind chance*, than an *infinitely wiſe, perfect, and reaſonable Being*, or tremble at the thoughts that there ſhould be ſuch a Being. Only the malice of an infinitely

evil Being could rejoice that there were no ſuch thing as an infinitely good one, or that infinite reaſon ſhould be cut off from nature. Finally, if *ſuperſtition* is ſuch a *dreadful evil*, the beſt way to guard againſt it is, *to ſearch things to the bottom*, and find out their *cauſes* impartially; and thence to eſtimate the grounds of *hope* and *fear*. And, after all, it doth not appear that *chance* and *atoms*, that is, *dead matter* and *unguided motion* is ſuch a firm principle of ſecurity, as to find out from the principles of reaſon that *an infinite intelligence guides the affairs of the world*. And if an infinite intelligence guides the affairs of the world, we need not then be afraid, what, or how many creatures the world may contain.

XX. If it were material, it might be obſerved here, that *Cicero*, in his ſecond Book *de Legibus*, contradicts all that he had advanced in his Treatiſe *de Divinatione*; though he hath ſpoke better ſenſe in it upon every other particular than that of our dreams. But he ſaw, and was convinced, that men would make better members of ſociety, if they were religious, than if they were Academicks. As Philoſophers he teaches men to be Scepticks, or to maintain *that truth is not to be perceived:* forgetting, or at leaſt overlooking the inconſiſtency of teaching them, what, by conſequence, he allows is againſt the intereſts of ſociety: for certainly *practical truths* are inconteſtable. If it were poſſible that ſpeculative and practical principles could be oppoſite, I ſhould by all means cloſe with the latter; but it is impoſſible they ſhould be oppoſite; for *all truth* is conſiſtent with itſelf, as proceeding from the ſame infinite mind, where undoubtedly it is conſiſtent. But it is long ſince it hath been obſerved of this *great Man*, that his *academical Writings* are at variance with his other works; and that he may be confuted out of himſelf, and in his own words.

XXI. Thus I hope *this principle*, that the viſions, or φαντάσματα, offered to the ſoul in dreams, are not the work of the ſoul itſelf, is firmly eſtabliſhed; and that the objection which ſuppoſes the contrary cannot be urged a ſecond time. I endeavoured alſo in N° 7. to lay down another previous principle; to wit, That the ſcenes preſented to the ſoul in ſleep, in which there is ſo much *variety*, *action* and *life*, nay oftentimes *ſpeech* and *reaſon*, cannot be the effect of mechaniſm, or any cauſe working mechanically. This ſtill appears to me ſelf-evident: But an exception hath been made to it, and an hypotheſis offered, in order to account for

for dreams *mechanically*, [as I think.] This I ſhall alſo conſider, and endeavour to point out the ſeveral particulars which ſeem to render it inconcluſive. It is ſaid, "Though hiſtory and reaſon make it highly pro- "bable, that in ſome caſes ſeparate ſpirits act on the ſouls of men in "dreams, and at other times; yet it ſeems more reaſonable to explain "the common phænomena from the *union* of the ſoul and body, and "the neceſſary connexion thence ariſing between ideas in the mind and "certain motions in the body, or in thoſe parts more immediately united "to the ſoul: That this indeed will not make dreams more mechanical "than the other actions of external objects, or rather, than the motions "in the ſenſory on the ſoul; but it makes them all proceed from one "*principle* or *law:* That though there ſeems to be a difficulty in ac- "counting for a train of reaſoning, which is very frequently in our "dreams, from this general ſolution; yet if what ſome Philoſophers have "ſaid of *traces* in the ſenſory, be true, and the relation that may be "between them, when the ideas have a connexion which may make the "animal ſpirits flow from the one to the other; a train of ideas which "may excite in us what is equivalent to a diſcourſe, may ariſe from it: "That the confuſion and incoherence of many, nay, moſt of our dreams, "favours this account; the ſucceſſion of ideas in our minds, when mu- "ſing awake, is very near to this; and the phænomenon of memory "may illuſtrate it."

XXII. This account is as ſpecious as the hypotheſis can admit of, and touches on every hint that may give it a remote degree of probability: But a wrong hypotheſis will not bear cloſe reaſoning, nor an application to particular inſtances. Here it is owned, *that hiſtory and reaſon make it highly probable, that in ſome caſes ſeparate ſpirits act on the ſouls of men in dreams, and at other times.* So far I think is right. But if this is allowed, it will not follow that an hypotheſis which gives a contrary account of the *common inſtances*, can make them all proceed from one principle or law, as is aſſerted of this. Thus, unleſs this *conceſſion* is again retracted, there muſt be two very different hypotheſes for the ſolution of this phænomenon; *ſeparate ſpirits*, and *mechaniſm:* and I do not ſee that it can be retracted. And if there be any beauty, or philoſophical ſimplicity, in aſſigning one cauſe for one kind of *appearance*; this hypotheſis doth not reach that. In another caſe it was ſaid, that *by reducing more phænomena to one principle, cauſe, or inſtrument, the beauty of nature*

was ſet in a greater luſtre. But there remains a greater difficulty, if we allow two ſuch different cauſes as *ſeparate ſpirits*, and *mechaniſm*, to excite our dreams in ſleep: For what ſhall we make the *criterion*, or mark of diſtinction between the effects of the *intelligent cauſe*, and of *mere mechaniſm?* May it not appear ſtrange to advance ſuch a ſolution, as that we cannot diſtinguiſh the *one of theſe* from the *other?* When *hiſtory* is mentioned as affording inſtances of the firſt kind; it ſeems ſuch dreams as are followed by the event, are allowed to be exhibited by ſeparate ſpirits. But if one ſhould dream *that a perſon came and ſpoke to him*, and this really happened next day; and again, if he ſhould dream *that a perſon came and ſpoke to him*, and no ſuch thing happened: the firſt of theſe would be the work of *intelligence*, and the other of *mechaniſm*; and yet the effects are equal, or both the ſame. And it cannot be ſaid that this ſuppoſition is abſurd, or even improbable. We have often clearer, more ſignificant dreams, and in which more reaſoning is contained, on which nothing follows, than thoſe are in which we ſee ſomething that afterward comes to paſs; as I believe is conſiſtent with the experience of moſt men. Thus the work of mechaniſm, that is, of mere matter and motion, ſhall be more perfect than the work of intelligence and deſign. I aſk, if this would not make ſtrange work in philoſophy? If one ſhould ſay, *All clear, reaſoning viſions are the work of intelligence*, and *confuſed ones of mechaniſm, or traces in the ſenſory*; let him conſider that the *gradation*, from clearneſs to confuſion, is ſo imperceptible, that he will never be able to fix a limit this way. We allow an *immaterial Mover* to the meaneſt *inſect* that has ſpontaneous motion; otherwiſe, the gradation is ſo imperceptible, we ſhould not allow one even to man. The caſe is the ſame here, I think; every thing ſeen which the ſoul doth not produce, and which matter, or *ſignatures* in it (that is, *traces*) could not produce, ſhould have an immaterial Mover, and this from the bare conſideration of *ſpontaneity*. Hence *our dreams muſt be all mechanical, or all immechanical.* That they are all *mechanical*, no man will maintain; for mechaniſm might then have life, ſpontaneity and reaſon. And there is this farther reaſon why they ſhould all be *immechanical*, which I mentioned before in that ſeventh paragraph, *viz. Philoſophy doth not hinder us from aſſigning a cauſe that can do more than produce the effect; but ſtrictly prohibits us to aſſign one that cannot do ſo much:* For aſſigning the latter would be to own the atheiſtical principle; which if it could be true in the leaſt aſſignable inſtance, the Atheiſt would gain his point univerſally. I

wiſh this were conſidered. If I were perſuaded that the effect might have ſome perfection, that its cauſe could not communicate to it, no argument for the Being of a God would ever be able to convince me.

XXIII. It is farther to be obſerved, that the union of the ſoul to the body, which is inſinuated here to be the cauſe of dreams, only renders them poſſible. If the ſoul, or percipient Being, were not united to, and preſent with the ſenſory, any impreſſions made, or motions excited there, could never be perceived: the ſenſory, by what was ſaid in Sect. 2. being but dead matter. But ſtill the *cauſe* that *makes* theſe impreſſions, or *excites* theſe motions, is wanting. There is certainly a connexion between ſuch impreſſions made on the ſenſory, and certain ideas being excited in the ſoul: that is, ſuch impreſſions made will excite ſuch ideas and no other. But pray, what is that to the purpoſe? Becauſe every impreſſion hath a *fitneſs* to excite ſuch an idea, it will not follow that the idea may be excited without the impreſſion is made. The *fitneſs* therefore or *connexion* between the motion impreſſed, and the exciting ſuch an idea, will never ſupply the cauſe that impreſſes the motion. This may be illuſtrated by a familiar compariſon. When a bell hangs in an outer room, and a cord tied to it is conveyed to another place; it would not here follow that the bell could ring without a hand, becauſe there was a *connexion* or *communication*, by means of the cord, between it and the next room. Juſt ſo, the *moving hand*, I think, is wanting in this ſolution: But, if that *cauſe* which moves the ſenſory be allowed, it accounts for all the reſt. *Union* and *connexion* of themſelves are no efficient cauſes, and will never anſwer for the origin of the motion. This *ſolution* is indeed a general explication, how, whatever affects the ſenſory excites ſome idea or other in the ſoul; whether *the thing*, acting on the ſenſory, be ſome *external object* while we are awake, or *ſome other cauſe* while we ſleep: but it does not account for *that thing* itſelf, which ſo affects the ſenſory. Or, if *union* and *connexion* ſuperſede the neceſſity of ſuch *a cauſe* in our dreams; why may they not in our waking ideas? And then (as Dean *Berkley* contends) there may be no *external objects*.

XXIV. It is ſaid, "this *ſolution* will not make dreams *more mechanical* "than the other actions of external objects, or rather than the motions in "the ſenſory on the ſoul." But I beg leave to obſerve that there is no parity, either in mechaniſm, or in any other reſpect, between the ſenſory (which

is

is but *dead matter*) repreſenting innumerable *living ſcenes*, without the action of *external living objects*, and the external objects themſelves acting on the ſenſory, and thus conveying notice to the ſoul. In the laſt caſe, the ſenſory is but the *medium of conveyance*, and in the firſt caſe it ſhould be the *Agent*. This makes a wide difference. A word might have been dropt concerning the cauſe of the motions in the ſenſory. I have ſhewn good reaſons againſt *ſelf-moving matter*; and cannot allow it here. If the ſame motions were excited in the ſenſory, as would be if theſe words

[Ὦ Θεμιστόκλεις, ὑστέρει Κεφαλῆς λεόντων, ἵνα μὴ λέοντι περιπέσῃς] *(r)*

were pronounced while the perſon is awake; it is agreed on all hands, that the ſame ideas would be raiſed in the ſoul: but if theſe motions may exiſt in the ſenſory fortuitouſly, or without any adequate cauſe in dreams; then *any thing might do any thing:* or let it be ſhewn me where we can ſtop. If an *eccho* ſhould repeat ſeveral words, which it never received, (pardon the impropriety) it would be no ſatisfactory account of this to ſay, It is the property of ſuch and ſuch figures, to reverberate the undulations of the air, ſo as to imitate articulate words, and raiſe the ſame ideas as if the words were ſpoke by a living perſon. The great queſtion here would be, How the *eccho*, whoſe known property it is to convey what it *receives*, could convey what it *receives not*. The caſe of words in dreaming is pretty near this. And I might argue the ſame way as to objects of ſight. If a mirrour repreſented images when their objects were not preſent; how far would it be from ſatisfaction to tell me, that it reflected the incident rays of light in ſuch a manner, that all the rays proceeding from one point of the *object* concurred to form the like point of the *image*. For if no object were preſent, there would be no *incident rays* to be reflected: ſo in this caſe, if no object acted on the ſenſory, no motion could be excited in it, nor idea raiſed.

XXV. It may perhaps be ſuppoſed, that we might truſt to the circulation of the blood, or the mechanical motion of ſome other fluid, for doing ſo much as to excite theſe motions in the ſenſory. This indeed is generally ſuppoſed the cauſe of theſe motions; but I may venture to ſay

(r) O *Themiſtocles!* take up thy quarters ſhort of the Lion's-head; leſt thou fall really among lions. *Plutarch. in Themiſt.*

that

that ſcarce any ſuppoſition can be more abſurd. Let us firſt ſuppoſe theſe motions orderly; and, ſecondly, that they may be diſordered. Now in the firſt caſe, no man is able to imagine that the ſame fluid, purſuing its own courſe mechanically, conſtantly, equally, ſhould at this inſtant repreſent *nothing at all* by its motion; and in the twinkling of an eye, cauſe *a houſe*, *a field*, *a giant* to ſtart up; and then a little after, things of quite a different nature. Who ſees not that ſuch a mechanical cauſe, if it repreſents things at all, *muſt always repreſent the ſame things*, or nearly the ſame; with an *even*, *uninterrupted tenor*; without ſuch *long pauſes*, or *monſtrous tranſitions* to things of oppoſite and contrary natures? When this is thoroughly conſidered, no man is able, I ſay, let him do what he can, to imagine it poſſible. Every tranſition muſt have its *determining cauſe*, according to all the laws of reaſoning; and the wider the tranſition is, and the more oppoſite the natures of the things joined are; the farther will this appear from being the effect of a *neceſſary mechanical cauſe* to any rational Enquirer. We propoſe to ourſelves a *frugality of cauſes* in the works of nature, which philoſophy doth by no means countenance. *Borelli* hath ſhewn that nature makes uſe of prodigious motive power to move ſmall weights. No change is produced in the ſtate of matter without a *living agent*. The motion of the ſmalleſt reptile requires the power of the *Firſt Cauſe*. Only here matter may change its own ſtate, and do wonders beſide! One may ſay indeed *that the ſingle principle of gravitation performs all the various phænomena in the material world.* But how, I pray, doth it this? Is it not by the various, conſtant, univerſal impulſe of the God of nature?

Let us in the next place imagine that the motions of the fluids in the body are diſordered, and thence that the motion of the animal ſpirits, or of any other matter we pleaſe to fancy in the body, is likewiſe diſordered. How much is this able to perform? If *order* can do nothing, *diſorder* can do leſs. In a regular motion of the fluids (or of any other particles of matter which they may be ſuppoſed to move) the ſcenes of viſion ſhould go on regularly, mechanically, conſtantly; and ſuch images only ſhould be repreſented whoſe *traces* were ſtill in the brain, and moſt patent there. Now in the diſordered motion of theſe fluids the ſcenes exhibited ſhould ſtill be *the ſame ſcenes*, but only broken and diſordered. This is a juſt inference; yet it is far from being the caſe. Could the diſorder of inert particles of matter, make them jump into the regular formation of ſomething they could never otherwiſe have

represented, so as to imitate *action*, *life*, and *even reason*. This would in effect be *Epicurus's dance of atoms!* We might as well suppose that the small particles of dust, which are carried about by the motion of the air in a sun-beam, should form of themselves the figure of a man, with life and action; as that the animal spirits, tossed either by the regular or irregular motion of a fluid, moving along its own channel, should perform such an effect. Let us remember that animal spirits, according to all the notion we have of them, are only very small particles of matter which are the immediate instruments of the will, when the soul would excite motion in any part of the body; but here they are supposed *to act of themselves* independently on the will, and contrary to it: and certainly, if they are matter at all, this is a contradictory supposition; and if they are not matter, they are *spirits* in a literal sense. It is insinuated that, *if the traces in the sensory have a relation* (which is when the ideas have a connexion) this may make the animal spirits flow from the one to the other of these traces. But I ask, *where*, or *how far* one can suppose them to flow? For *words*, *actions*, *persons* that never were heard or seen before, can have no *traces* in the sensory. Why should ideas be joined that were never joined in nature? Or why should ideas be disjoined, which have been always before presented together? If I never saw a person but once, and that *on horseback*, or *sitting in his night-gown*; I must always think on him while awake, as in that posture, or that dress. In short, if it should be said, that the reason why the animal spirits flow from one of these traces to another, is *because they are not related*, or really *not existent at all*; it would be every whit as true! We take things in the gross, and satisfy ourselves with a distant hint; but when exactly viewed, the whole scheme proves contradictory to experience.

XXVI. It is said, "what is equivalent to a discourse, or reasoning, may "arise from the flowing of the animal spirits into these traces." But I refer to the common sense of all men, if this were the case, whether the discourse, or reasoning in the dream, should not be the same with what we had heard, or some time or other held, in our waking thoughts: or whether it is not certain, that we sometimes hear discourses, and see persons in dreams, which we never heard, and whom we never saw before. And since this cannot be denied, how shall we account for this discourse and reasoning from *mechanical motion*, *particles of sluggish matter*, and *traces* or *signatures* on a material organ? The attempt seems desperate; and we might as well

well undertake to account for the formation of a world, from *atoms* and *chance*. *Reaſon* is the greateſt perfection we can have any notion of; and a *reaſoning Being* is one of the higheſt effects Infinite Power can produce. For it is one thing to make an effect according to reaſon; and quite another, to make *ſuch an effect* as ſhall be itſelf a *reaſoning Being*. And can matter and motion (that is, inert particles, moved mechanically) riſe to this perfection? And no living Being (neither the *ſoul itſelf*, nor *ſeparate Spirits*, nor *the Deity*) is ſuppoſed here to interfere. We may perhaps think a ſentence ſpoken in a dream a contemptible phænomenon. But what a compaſs of ideas muſt even a ſingle ſentence *include*, *refer to*, or *ſhew the Being to be poſſeſſed of?* If a perſon can anſwer *but one* queſtion pertinently, we immediately own that he is a *thinking reaſoning Being*. And could animal ſpirits fall into their *proper order*, give themſelves the due *impulſe*, *direction*, *ſucceſſion*, as to ſeem to ſay but thus much, *I am, O* Brutus! *thy evil Genius: but thou ſhalt ſee me again at* Philippi? And thus much I am ſure hath been ſpoken to us in a dream; whether *theſe words* were ever ſpoken or not. And if thus much had been but once ſpoken, it would ſhew that more might have been ſpoken. And in truth how much more is ſpoken to us every night? Theſe particles of matter called *animal ſpirits* are indefinitely ſmall, and incredible numbers of them muſt concur to produce ſuch an effect; and every one of the particulars I juſt now mentioned is to be *determined*; *viz.* their *number*, *order*, *ſucceſſion*, as to time, *impulſe*, and *direction*; without any of which the effect could not be produced: and there is nothing in the ſuppoſition to *determine* theſe ſeveral particulars but dead matter. Whence I conclude, unleſs the reaſoning in the firſt and ſecond Sections above is wrong, this hypotheſis is demonſtratively falſe.

XXVII. If this hypotheſis were true, our dreams would have quite other circumſtances and qualifications than they have. The ſeveral differences I ſhall here mark. Firſt, there would be always a connexion or relation between the ideas excited in the mind in dreams; and ſuch a connexion, and cauſe of tranſition from the one to the other, as there is while we are awake: for the ideas having been joined together while we are awake, is ſuppoſed the cauſe why the one ſhould excite the other while we are aſleep. But commonly there is no ſuch connexion, and the tranſition is ſo *wild* and *arbitrary*, as ſurpriſes, and leaves us quite in the dark, how it could come about. 2. No new object could be thus offered to the ſoul, but ſuch as had ſome time before occupied our waking thoughts. And yet in every inſtance it is otherwiſe. 3. All our dreams then ought to

be according to nature, and the real exiſtence of things from without. And yet they are *never* thus qualified; but *perſons*, *places*, *circumſtances*, are quite changed. 4. The ſtrongeſt ideas, and thoſe that have been moſt in our thoughts of late, ſhould always be offered to us in our dreams: for the traces of thoſe are deepeſt, and moſt patent in the ſenſory. 5. The mind could never be ſurpriſed with theſe familiar ideas, which have been often before coupled together: and much leſs could it be terrified with them. 6. But chiefly there ſhould be no diverſity, or diſtinction of conſciouſneſs in our dreams, as when many perſons ſeem to act their reſpective parts. How could *the awakening theſe traces* hold conference with us; ask queſtions of us, and not only *perſonate* our *acquaintance*, but *ſtrangers* alſo? For theſe traces, like a train when kindled, ſhould run on mechanically in their own courſe; and not ſtop at proper places, and wait for a return. This is a prodigious difference, if we conſider it right. It is as if I ſhould ſuppoſe that the words of a book (which I may call traces in it) ſhould extemporarily change themſelves from the ſubject treated of, and become *queſtion* and *anſwer*, according to whatever I ſhould ſay. Laſtly, if ideas excited other connected ideas, and *one trace* awakened another, according as they were related; *what ſhould hinder us from being quite awake?* At leaſt this *exciting* and *awakening* ſhould go quite round, as far as there were traces thus related. And yet we ſee *new* and *foreign* ideas excited, while the traces of waking ideas are kept cloſe ſealed up. A man dreams that he is in new circumſtances, every night; though he ſhould neceſſarily dream, according to theſe traces, that he is in the circumſtances, in which he really is; for the traces of theſe are without all doubt moſt ſtrongly connected in the ſenſory. Thus experience directly contradicts this whole affair of exciting ideas by connexion in our dreams. If this hypotheſis had been applied to any one inſtance, where a perſon ſeems to diſcourſe with us in our ſleep, it would have appeared how inſufficient it was. Let it be tried by the example of *Marius* or *Alexander* above, (N° 13 and 18.) It is eaſy to make hypotheſes that perform nothing.

XXVIII. The confuſion and incoherence of moſt of our dreams, rather *diſproves*, than favours this account; for as on the one hand, they could not have the *life*, *action*, and *deſign*, we obſerve in ſome of them; ſo neither on the other, could they have that extreme and monſtrous oppoſition of ideas, obſerved in others of them. There would always be a relation and connexion between thoſe ideas, according as they had been joined together while we were awake; ſince this connexion is made the

formal cauſe of their being ſtirred up. The animal ſpirits are but inert particles of matter, that have no ſpontaneity of their own, to join *extremes*, and paſs over *intermediate traces*. Our memory, ſo far as we are active, no way illuſtrates this ſolution: for here the ſoul is paſſive in all that is offered to it. When one *muſes*, the ſoul moves its attention gradually from one object, or one idea, to another; but ſtill with conſciouſneſs that it doth ſo, and according to the connexions which have been formerly made between them. There is no hurrying from one thing to another, without coherence or relation. Whence this particular illuſtrates the incoherence of our dreams as little. Men are not paſſive in *memory*, or in *muſing*, but with reſpect to the firſt idea brought in view, by ſome external cauſe: in all the reſt of the train, the ſoul is active more or leſs. In brutes it is otherwiſe. If memory could illuſtrate this account, or if the ideas were excited in our dreams according as they were connected at other times; then, as I have already obſerved, *being aſleep* would very little differ from *being awake*, as to the ſtate of our thoughts: for our waking ideas would all come in view, according to the order and clearneſs of theſe connexions. This account therefore anſwers neither for incoherent, nor any other ſort of dreams. For upon this ſuppoſition a man could never have wilder dreams than his waking thoughts, or his traces could furniſh him with: yet in ſome caſes, all is enchanted and preternatural; the ſoul is ſuddenly thrown into wild and uncouth circumſtances; objects are metamorphoſed under the eye, which no traces in the ſenſory, by being awakened, could ever effect. It ſeems to be in the hands of a powerful Magician, who creates ſtrange ſights, and inverts nature at pleaſure. This particular hath not yet been attended to: but whoever pleaſes to conſider the whole *Appearance* at leiſure, will ſee that the very *wildneſs* and *extravagancy* of our dreams, as little agrees with a mechanical cauſe, as the *coherent* and *rational* part of them. If this had been obſerved, mechanical ſolutions would never have been offered. And if the rational part is not the work of the ſoul itſelf, nor *the very wildeſt part* the work of mechaniſm; where ſhall we find *a cauſe* for *this effect?* For undoubtedly it muſt have ſome cauſe. If a man aſſigns any other cauſe, than what I have aſſigned above; there are ſuch inſtances at hand, as immediately ſhew the impoſſibility of what he aſſerts.

XXIX. I have been the more particular in anſwering theſe two objections, as the anſwers to them eſtabliſh the two *principles* I had previouſly

laid down in N° 6 and 7; and that men may ſee what it is they advance, when they aſſign at random theſe cauſes of our ſleeping viſions. And ſince all the other hypotheſes for the ſolution of this phænomenon of dreaming, are reducible to theſe two; the concluſion in N° 11. is rendered, I preſume, unexceptionable. However, that the ſtrength of the concluſion may the better appear, I ſhall bring it out in another method, and by a very ſhort and clear argument; which is this: The appearances offered to the ſoul in dreams, all *idle*, *trifling*, *incoherent*, *abſurd*, as they are, muſt either be the work of *ſeparate living Agents*, or the immediate effects of the *God of nature*. This may ſurpriſe: yet there is no medium. For firſt, *chance* can do nothing in God's world. And *ſecondly*, whatever is performed by *mechaniſm*, is done with deſign; ſince matter can neither move itſelf, nor alter its direction, nor effect the leaſt variation from the end propoſed. *Thirdly*, no mechaniſm is ſpontaneous, or the work *of the ſoul* itſelf. *Fourthly*, God is the ſole Mover in all mechanical motions, eſpecially in the animal body. Therefore, whatever poſſible way dreams are produced, if the agency of ſeparate ſpirits be refuſed, we muſt aſcribe them to the immediate power of the Deity. Let this be conſidered; which, as I take it, is demonſtrative, and adds a new force to all that has been ſaid: and thoſe who reflect on what was ſhewn, Sect. 1 and 2. will not conteſt it, as being a fair conſequence of the *inertia* of matter, and of the univerſal influence of the *firſt Mover* upon it.

And this concluſion is not affectation in me; for I am not able to avoid it: nor will any other man who thinks accurately, be able to avoid it. The only way to avoid this concluſion, would be, either to incur univerſal Scepticiſm, mentioned in N° 12. by loſing *the ſenſe* of our own conſciouſneſs, or *the diſtinction* between our own conſciouſneſs, and that of any other Being; or elſe to incur direct Atheiſm, by allowing that *dead matter*, and *unguided motion*, may not only perform the effects *of reaſon*, but be itſelf *a reaſoning thing*; or thirdly, *to think nothing at all about it*. The laſt of theſe it is very hard to do; and a reaſonable man will never do either of the two firſt. Therefore I ſhall not dwell long upon the little cavils that may be raiſed. The ſuppoſed abſurdities may lie more in our prejudices, than in the nature of the things themſelves. Objections indeed from reaſon and philoſophy ought always to be liſtened to; and for ſuch I ſhall always preſerve a due regard, and either anſwer or ſubmit to the force of them when urged againſt me: but *prejudices* are only *prejudices*; and the hiſtory of Philoſophy acquaints us, that

many *points* have been reckoned *absurd*, *heretical*, *damnable*, which yet the strength of their own evidence has afterwards made popular, and caused to be universally received. However, some of the more common prejudices it may be proper afterwards to take notice of, so far as to shew how they may be removed, by what hath been already said.

XXX. Nor is this conclusion *new*; the *constancy* and *universality* of the appearance, seems designed to remind us of it *at all times*; and accordingly men in the earliest ages, long before *Atheism* was broached, or learning thought to consist in *doubting*, generally agreed in it, as a truth pointed out to them by nature herself. And ever since we have had any records of history, or writings of any kind, it hath been admitted by the wisest men. *Homer*, the first and chief writer of that sort, to preserve probability, in bringing about and celebrating the revenge of *Achilles* on the *Greeks*, makes the *pernicious dream* to be sent by *Jupiter* to *Agamemnon*, to persuade him to draw them out again to battle (*s*). *Achilles* says, that *dreams come down from Jupiter*: and that possibly the reason why the pestilence was sent into the *Grecian* camp, might have been discovered to some in a vision. And *Agamemnon* tells the *Chiefs* convened in council, that *the divine dream came down to him, through the ambrosial night* (*t*). This shews that it was then both the learned and popular opinion. Hence the *Poets* generally, whose aim it is to follow nature, when they have any great incident to prepare, or some strange event to bring about a *dignus vindice nodus*, as *Horace* calls it, often make use of the agency of spirits in dreams, as the surest way to preserve the imitation they propose (*u*). *Ovid*, in his way, accounts for the strangeness of dreams, by making three cunning Deities the cause of three different kinds of objects offered to the fancy in sleep; *one* that represented men, and could act rationally; *another* that imitated brute creatures; and a *third* that put on the forms of inanimate things (*v*). And indeed, bating the poetical

(*s*) ——Ἀρίστη φάινετο βουλή,
Πέμψαι, ἐπ' Ἀτρείδῃ Αγαμέμνονι οὖλον ὄνειρον. Iliad. 2.

(*t*) Ἀλλ' ἄγε δή τινα μάντιν.——Iliad. 1. and Κλῦτε, φίλοι, Θεῖός μοι —— Il. 2.

(*u*) To pass over a thousand instances of this kind, even the severest will pardon my mentioning that in *Shakespear's Macbeth*, where the Lady in her sleep endeavours to wash off the *stain* of *the King's blood* from her hands, which it is impossible to read, without a dreadful expectation of the future catastrophe, and a horror of the cruel murder.

(*v*) *At pater* * *è populo natorum mille suorum*
Excitat artificem, simulatorémque figuræ
Morphea. Non illo jussos solertiùs alter

* *Somnus.*

Exprimit

poetical dreſs and names, and aſſigning a certain number (though in the ſame place, he ſeems to allow an indefinite number [*mille*] of ſuch ſpirits), there can be nothing more true and philoſophical, than this account of the cauſe of dreams. For here it happens that *that* which is eaſieſt to be conceived, and is moſt entertaining to the imagination, is the only conſiſtent cauſe that can be given. *Atheiſm* is equally unentertaining to the *fancy*, and to the *rational faculty*; diſagreeable to our nature in every reſpect; beginning and ending in *univerſal deadneſs*; a world of brute matter, toſſed about by chance, without a governing mind, and living immaterial Beings in it, affords a lonely unpleaſant proſpect to the ſoul. If things were thus, we ſhould want ſcope for the imagination, and even for rational enquiry; and muſt ſoon come to empty chance, or unſupported neceſſity, which extinguiſhes ideas, and puts an end to all purſuit. How much more agreeable is it, to be led by all that we ſee here, to an infinite Reaſon, than to have this dark and gloomy proſpect of nature! Undoubtedly, unleſs infinite perfection imply a contradiction, it muſt be neceſſary, becauſe it is beſt (*x*).

XXXI. Moral philoſophers, whoſe buſineſs it was not to ſearch out the cauſes of things, but to teach *how to act*, eſpecially the eaſtern philoſophers, took it ſo much for granted that the tranſactions which are carried on with us in our ſleep, were to be aſcribed only to the efficiency of ſeparate ſpirits, that they gained both *authority* and *probability* to their doctrine, by delivering it under the form of *viſion* or *dream*, wherewith they were prompted by ſome friendly intelligence (*y*). Again, in the

Exprimit inceſſus, vultúmque, modúmque loquendi.
Adjicit & veſtes, & conſuetiſſima cuique
Verba. Sed hic ſolos homines imitatur. At alter
Fit fera, fit volucris, fit longo corpore ſerpens.
Hunc Icelon ſuperi, mortale Phobetora vulgus
Nominat. Eſt etiam diverſæ tertius artis
Phantaſos. Ille in humum, ſaxúmque, undámque, trabémque,
Quæque vacant animâ feliciter omnia tranſit.
Regibus hi, ducibúſque ſuos oſtendere vultus
Nocte ſolent: populos alii plebemque pererrant.
Metamorph. lib. 4. ver. 633.

The ſoureſt Philoſopher muſt admire this deſcription, and *Morpheus*'s part.

(*x*) See the reaſoning, N° 25. Sect. 2.

(*y*) Every one will call to mind here the excellent pieces, done in imitation of this manner of writing, by the late Mr. *Addiſon*.

moſt

moſt learned, politeſt nations of *Aſia*, we find that interpreting of dreams was accounted a part of wiſdom and philoſophy, and that theſe men were in great eſteem in the courts of Kings (*z*). Now I ſhall allow (though perhaps I need not, for even natural reaſon tells us, that the ſame Being who deſigns a warning to any perſon, may enable *another man* to underſtand and explain it, and not *him* to whom it was ſent; thereby bringing it about, that the *laſt* ſhall regard, and be directed by the *firſt*.) I ſhall allow, I ſay, that this art might be but a bold pretence, founded in wrong principles, and that the *pretenders* to it never ſpoke but *by gueſs*: but what I would have to be obſerved is, Whether or no men, from their own experience, in ſeeing in their ſleep what really came to paſs afterward, were not firſt brought into an opinion, that ſome *ſuperior Being* ſent theſe friendly warnings; and that clear and extraordinary viſions had a ſignificancy in them; and thereby firſt made this an *art*, and encouraged theſe *bold pretenders* to impoſe upon them? I am afraid, if we do not grant thus much, we ſhall not only *deny the faith of hiſtory*, but *contradict experience*. And this ſhews, that the concluſion here drawn ſeemed to be a principle generally agreed upon in the world, and in the earlieſt times. And it is hard to think how it could be otherwiſe; men always dreamed, and ſome men would reflect upon them. It is alſo farther to be obſerved with reſpect to thoſe very Interpreters, that though they ſeemed to be the firſt favourites, yet their poſt was not very deſirable; for if they happened to miſtake in ſome great matters, it was at the peril of their lives (*a*). So that it would ſeem they were ſometimes in the right.

(*z*) Of this kind were the μάγοι ὀνειροτόλοι in the court of *Aſtyages* king of the *Medes*, who interpreted his two dreams to him, concerning his daughter *Mandane*, the mother of *Cyrus*. *Herodot.* lib. 1. cap. 107, 108. They were in great honour and eſteem with him, as appears by their ſpeaking to him thus, ——Σέο δ' ἐνεστεῶτος βασιλέος, ἐόντος πολιήτεω, καὶ ἄρχομεν τὸ μέρος, καὶ τιμὰς περὶ σέο μεγάλας ἔχομεν· οὕτω ὦ πάντας ἡμῖν σέο τε, καὶ τῆς σῆς ἀρχῆς προοπτέον ἐστί. —— cap. 120. And according to this Author, they interpreted both theſe dreams rightly.

(*a*) The ſame *Magi*, becauſe they could not diſtinguiſh between a *mock-monarch* and a *real one*; but adviſed *Aſtyages* to ſend home *Cyrus* in ſafety to his parents, the danger being paſt, he having exerciſed his kingdom among the children in the cottages; were afterwards put to death, when *Aſtyages* heard that *Cyrus* was preparing an expedition againſt the *Medes*—— Πρῶτον μὲν τῶν μάγων τοὺς ὀνειροπόλους, οἳ μιν ἀνέγνασαν μετιέναι τὸν Κῦρον, τούτους ἀνεσκολόπισε cap. 128.

XXXII. I ſhall farther obſerve, that long after *Atheiſm* had been broached, and the licentious wits of *Greece* had ſet themſelves to refine on that new ſcheme; *Plutarch* thinks that in good philoſophy, we muſt have recourſe to the principle of ſeparate ſpirits, to account for theſe appearances, from the two inſtances only of *Brutus* and *Dion*, mentioned above. The place is remarkable; therefore I ſhall quote it. He had been ſpeaking of the common arguments againſt this principle, that women and children, and other people, were only liable to ſuperſtitious fancies; and adds, "But if *Dion* and *Brutus*, men of great ſolidity, and philoſophers, neither weak, nor credulous, were ſo affected with theſe viſions, as ſeriouſly to relate them, and conſult their friends upon them, I am afraid we muſt return to the opinion of the old philoſophers [τῶν πάνυ παλαιῶν], and own that there are bad ſpirits, who envy good men, and endeavour to ſtumble them, leſt going on in the ways of virtue, they ſhould enjoy a happier lot after death than themſelves (*b*)." Theſe are the words of *Plutarch* of *Cheronea*, and purely in point of philoſophy. Sure they are not women nor children only, who have ſuch viſions in their ſleep. Thus much of the antiquity of this opinion; not that any body denies it, but to remind men of the reaſon of its being ſo ancient. We may next conſider the remaining objections againſt it.

XXXIII. There are perſons who ſay they never dream; and ſome Authors give us accounts of ſuch. *Suetonius* tells us, that *Nero* never uſed to dream, till a little before his death he began to be terrified with portentous viſions in his ſleep (*c*). *Ariſtotle* ſays, ſome men never dream in their

(*b*) Εἰ δὲ Δίων καὶ Βροῦτος, ἄνδρες ἐμβριθεῖς καὶ φιλόσοφοι, καὶ πρὸς οὐδὲν ἀκροσφαλεῖς οὐδ' ἐυάλωτοι πάθος, οὕτως ὑπὸ φάσματος διετέθησαν, ὥστε καὶ φράσαι, πρὸς ἑτέρους, οὐκ εἶδα μὴ τῶν πάνυ παλαιῶν τὸν ἀποστάτην ἀναγκασθῶμεν προσδέχεσθαι λόγον, ὡς τὰ φαῦλα δαιμόνια καὶ βάσκανα, προσφθονοῦντα τοῖς ἀγαθοῖς ἀνδράσι, καὶ ταῖς πράξεσιν ἐνισάμενα, τάραχας καὶ φόβους ἐπάγει, σειστὰ καὶ σφάλλοντα τὴν ἀρετὴν· ὡς μὴ διαμένοντες ἀπτῶτες ἐν τῷ καλῷ, καὶ ἀκέραιοι, βελτίονος ἐκείνου μοίρας μετὰ τὴν τελευτὴν τύχωσιν. Plutarch. in Dion. As if he had ſaid—I do not ſee but we muſt admit that opinion of the oldeſt Philoſophers, which is yet more wonderful; not only concerning the ſimple exiſtence of ſuch Beings; but that a wicked and invidious ſpecies of thoſe Demons, envying good men, &c. The pregnancy of the inſtance ſeems to extort this ſuppoſition from *Plutarch*; which theſe new Writers ſhould remember, who *bring in* his Authority to ſupport the poſition, *that Atheiſm is not near ſo great an evil as ſuperſtition.*

(*c*) *Terrebatur ad hæc evidentibus portentis ſomniorum, nunquam antea ſomniare ſolitus.* Sueton. in Neron. cap. 96.

Some

their whole lives (*d*); and that young children do not dream; nor people come to years immediately after eating (*e*). Mr. *Locke*, in a place referred to above, tells us of one who was bred a ſcholar, and had no ill memory, who never dreamt in his life, till about the twenty fifth or twenty ſixth year of his age, when he fell into a fever. If this be ſo, dreams that are not, need not be accounted for; and ſuch perſons will want that which gives the ſureſt conviction in this caſe, namely, experience; and the reaſoning above will be to them conditionally true only; that is, if there be

Some Writers go ſo far as to tell us of whole Nations that never dream. *Pomponius Mela*, ſpeaking of certain people in *Africa*, ſays, *Ex his qui ultra deſerta eſſe memorantur, Atlantes ſolem execrantur, & dum oritur, & dum occidit, ut ipſis agriſque peſtiferum. Nomina ſinguli non habent: non veſcuntur animalibus: neque illis in quiete qualia cæteris mortalibus viſere datur.* De Sit. Orb. lib. 1. cap. 8. But the certainty of this is put upon *hear-ſay* only; and we may judge what credit it deſerves, from other relations in the ſame place, where he tells us of ſome Nations who are without heads, and have their faces in their breaſts, *&c. Blemmyis capita abſunt: vultus in pectore eſt. Satyris, præter effigiem, nihil humani. Ægipanum, quæ celebratur ea forma eſt.* There is nothing that could make a human body monſtrous, which is not related by *Geographers* and *Travellers* as real, in ſome part or other of the earth. Thus this Author goes no farther than *Germany*, or rather *Holland*, to find men who have feet like horſes feet, and others who have their ears ſo large, that they wrap them about their bodies, inſtead of cloaths. ——*Eſſe equinis pedibus Hippopodas, & Panôtos, quibus magnæ aures, & ad ambiendum corpus omne patulæ, nudis alioqui pro veſte ſint, &c.* lib. 3. cap. 6. Upon which *Voſſius* pleaſantly enough ſays, "Since theſe ears ſerved them for *cloaths* by day, for *coverings* by night, and for *umbrella's* in the heat, it is a wonder theſe *Authors* ſhould not add, *that the people made uſe of them as wings to fly withal.*" This indeed would have compleated the prodigy. Not far from the *Atlantes* who never dream, *Mela* tells us of another Nation, who, it ſeems, dream very ſeriouſly.—*Augilæ manes tantùm Deos putant: per eos dejerant, eos ut oracula conſulunt; precatique quæ volunt, ubi tumulis incubuére, pro reſponſis ferunt ſomnia.* And this appears more probable; for, as was ſaid before, the Phænomenon of dreaming, (miſunderſtood indeed, and miſapplied) ſeems to have given the firſt riſe to *Superſtition* and *Polytheiſm*. It is true, Voyages and Books of Travels tell us of ſeveral Nations, in different parts of the world, *who have no ſort of Religion, no name, nor notion of any ſupreme Being:* but if this be ſo, as Mr. *Locke* would have us believe, it ſeems the Inhabitants of theſe countries never dream. Since we can ſcarce conceive that this ſingle *phænomenon* ſhould not be enough to kindle up the notion of ſome *Religion* or other in the minds of men, though we could ſuppoſe all Religion once entirely loſt in the world. However, the *matter of fact* itſelf begins now to appear falſe; and theſe *monſters* gradually evaniſh, as the Countries they were ſaid to be in, are more reſorted to, and become better known. Nature ſeems to be every where of a piece with herſelf. But this is not the place to ſpeak more on this ſubject.

(*d*) Ἥδη δέ τισιν συμβέβηκεν, ὥστε μηδὲν ἐνύπνιον ἑωρακέναι κατὰ τὸν βίον. De inſomn. cap. 4.

(*e*) Διὸ καὶ μιτὰ τὴν τροφὴν, καὶ πάνυπαν νέοις οὖσιν οἷον τοῖς παιδίοις, οὐ γίνονται, ἐνύπνια. Ibid. cap. 2.

ſuch appearances, they muſt be from ſuch a cauſe. And thus far it muſt conclude, even to thoſe. But the concurring teſtimony of all the reſt of mankind, ſhould weigh ſomething with them over and above: for theſe inſtances are told but as rare (*f*). Perhaps ſome may affirm this, who do not take the trouble to reflect on the ſtate of their mind while ſleeping, becauſe of their intenſeneſs on their waking thoughts and buſineſs, or otherwiſe. *Ariſtotle*, in a place cited before, makes it a condition of the circumſtance's appearing, εἴ τις προσέχοι τὸν νῶν, ἢ πειρῶτο μνημονέυειν ἀνασάς; if he be attentive, and endeavour to recollect upon awaking. But that which chiefly invalidates their aſſertion, is, that it hath been ſhewn contradictory, in N° 23. Sect. 4. that they ſhould be certain of what they affirm: we can have no memory, or experience of a ſtate, which, by the nature of it, is a negation of all memory and experience. Some delirious perſons, whether in fevers or otherwiſe, when they come to themſelves again, remember nothing of what they ſaid and did then: yet they were active and percipient all the while. It cannot be affirm'd to be impoſſible that ſome kind of dreams, or the dreams of ſome conſtitutions, may not be thus qualified. As to *Ariſtotle*'s obſervation, *that after eating*, &c. I think it is contrary to experience; and the reaſon he aſſigns for it, ſhould conclude juſt the contrary. For if the motions in the ſenſory, continued after the objects are gone, be the cauſe of dreaming, as he affirms (*g*); a frequency of that motion would make dreams indiſtinct, (which ſeems to be the caſe, and doth not contradict the ſolution here given) but could not occaſion a not-dreaming. Laſtly, thoſe who think they ſay a great deal againſt this concluſion, by telling us they never dream, may pleaſe to obſerve, that their caſe agrees much better with the aſſertion, That our dreams are formed and repreſented to the ſoul, by an intelligent and free cauſe, than that they are mechanical, and neceſſarily produced. For then, dreaming muſt be cauſed by the mechanical motions of the animal œconomy, and therefore equable and conſtant according to that; or an effect

(*f*) *Ariſtotle* ſays, Στάσεν μὲν τὸ τοιοῦτόν ἐϛιν, συμβαίνει δ' ὅμως. Loc. citat.

(*g*) The reaſon he aſſigns, why we do not dream then, is juſt the ſame that he aſſigns, why we dream at other times——Πολλὴ γὰρ ἡ κίνησις διὰ τὴν ἀπὸ τῆς τροφῆς θερμότητα: and yet theſe κινήσεις ἀπὸ τῶν αἰσθημάτων, are the only cauſe of dreaming. If a κίνησις is the cauſe, a πολλὴ κίνησις may cauſe a confuſion, and not remembring, but cannot be the impediment. Beſides, ſince *ſenſation* and *dreaming* have the ſame original according to him; why is not ſenſation, while awake, impeded after eating. But this is the leaſt objection againſt *Ariſtotle*'s mechanical dreams.

of ſome material action, in *Lucretius*'s way; and therefore ſtill mechanical and neceſſary; whereas if the exhibiting thoſe ſcenes to us, depends on the will of free, intelligent Beings, and theſe again are ſubordinate to the government of a ſupreme over-ruling Being; it were eaſy to aſſign reaſons, no way inconſiſtent, why this appearance ſhould not be always after one uninterrupted tenor: or rather this laſt *cauſe* ſeems naturally to point out to us ſuch a variation. We contract a habit of *forcing our reaſon to ſubmit to our prejudices:* but let a man conſider, as it were for the firſt time, this appearance; if any thing can leſs agree with the *ſurpriſing variety* of the ſcenes offered to the ſoul in ſleep, than a mechanical cauſe; or with the *art* and *contrivance*, the *life* and *action*, nay the *ideas* and *reaſoning*, contained in what we hear and ſee during that time, than a *dead* and *undeſigning cauſe:* or rather if any thing can be more oppoſite. If a man ſpeaks to us while we are awake, we conclude that he hath ideas in his mind; that he is free, reflects, reaſons, methodizes: if ſomething ſpeaks to us while we ſleep, what are we to conclude concerning it?—— *Nero*'s beginning to dream before his unhappy death only, makes more for one ſide of the preſent queſtion, than his not dreaming all his life before (ſuppoſing the fact true) can make for the other. Reaſons neither contradictory nor improbable, might be aſſigned for this: but ſuch particularities are deſignedly avoided. Neither *chance*, nor *mechaniſm*, become more powerful before theſe *dreadful events*, than at other times. Who doth not admire *Virgil*'s making *Dido* ſee thoſe gloomy viſions, in a like caſe, as ſomething extremely natural?

XXXIV. On the other hand, there are men who tell ſuch *improbable, romantick ſtories* of their dreams; out of a vanity we all have, as if remarkable things happened to ourſelves beyond others; that even ſober people, and equitable judges, are on their guard what they believe. This is no leſs offenſive to the truth, than running into the other extream; for the *Sceptick* hath too great a ſcarcity of other arguments, to let one of this ſort paſs (*h*). *Plutarch*'s rule in a parallel caſe comes to this; *Nec omnia,*

(*h*) *Lucian* has diſplayed all his art, in that Dialogue which he calls the *Philopſeudes*, to make the folly and weakneſs complained of here, ſtand for a demonſtration that there are no ſeparate ſpirits. He brings together the chief men of the ſeveral ſects of the Philoſophers, to talk ſuch wild and weak things of apparitions and viſions, as ſhock common ſenſe: and introduces a Sceptick, who of courſe muſt have all the ſenſe and learning in the company, to confute

nia, nec nihil (*i*) ; and a ſober man will make it his rule. But albeit we may *pretend* experience which we have not, or *diſſemble* that which we have, to one another ; none of us can conceal his own experience from himſelf,

ſuch ſilly ſtories, and ſhew us the wiſdom and ſobriety of believing nothing. This part he acts well enough, till one of the company deſires him to give his reaſons for conſtant doubting. It was not ſo eaſy to acquit himſelf in this caſe. Their vanity and folly were his beſt arguments. All he ſays is, that Democritus *of* Abdera *ſhut himſelf up in a monument without the city, writing and ſtudying night and day ; and when ſome waggiſh perſons would have frighted him into a belief of ſpirits, with a counterfeit apparition ; without vouchſafing to look about at them, he deſired they would not diſturb him.* Οὕτω βεβαίως ἐπίστευε μηδὲν εἶναι τὰς ψυχὰς ἔτι ἔξω γινομένας τῶν σωμάτων. And with this flouriſh he artfully leaves the company, and avoids anſwering to the troubleſome queſtion about oracles. He believed that it is only matter which thinks in us, while we are alive ; and that therefore the ſoul is nothing at all when out of the body.

(*i*) I ſhall quote his reaſon for this rule, as well as the rule itſelf. It is in the life of *Camillus*, where having ſpoken of ſeveral prodigies, he adds, Ἀλλὰ τοῖς τοιούτοις, καὶ τὸ πιστεύειν σφόδρα, καὶ τὸ λίαν ἀπιστεῖν, ἐπισφαλές ἐστι, διὰ τὴν ἀνθρωπίνην ἀσθένειαν, ὅρον οὐκ ἔχουσαν, οὐδὲ κρατοῦσαν αὑτῆς, ἀλλ' ἐκφερομένην, ὅπου μὲν εἰς δεισιδαιμονίαν καὶ τύφον, ὅπου δὲ εἰς ὀλιγωρίαν τῶν θείων, καὶ περιφρόνησιν. The rule he lays down for this is, Ἡ δὲ εὐλάβεια καὶ τὸ μηδὲν ἄγαν, ἄριστον. Whoever pleaſes to conſider the catalogue of prodigies in this place, where he lays down the rule, will ſee they are none of the leaſt ſize. In ſhort, this δεισιδαιμονία, that is, a fear of ſpirits, hath been much abuſed by vain or weak people, and carried to an extreme, by deſigning and crafty men perhaps : but that it ſhould entirely be caſt off, I think the moſt rigorous philoſophy will not juſtify ; though Mr. *Bayle* ſays in a like caſe, *Auſſi faut-il avoüer, qu'il n'y a qu'une bonne & ſolide philoſophie, qui comme un autre Hercule, puiſſe exterminer les monſtres des erreurs populaires : c'eſt elle ſeule qui met l'eſprit hors de page.* (Penſées Diverſes. Sect. 21.) If this *ſolid philoſophy of his*, is founded on the *natural powers* of matter, it will never anſwer the end. So we find *Lucretius* boaſting of his philoſophy as an excellent remedy againſt the fear of any Being,

Hunc igitur terrorem animi, tenebraſque neceſſe 'ſt
Non radii ſolis, neque lucida tela diei
Diſcutiant ; ſed naturæ ſpecies, ratioque.

Lib. 1. ver. 147.

It is true, no evil can happen to us in God's world, but by our own fault ; but that ſubordinate Beings, are never permitted, or commiſſioned, to be the miniſters of his will, is a hard point to be proved. And that *direct Atheiſm* is better than this *Deiſidemony*, is horrid. It is to ſay, *rather than to believe that God may allow inferior Powers to be the miniſters of his will againſt us ; it is better to maintain that he hath no perfection, no power, is nothing ; nay, better to maintain, that there is no ſuch thing as reaſon, or truth, or goodneſs in nature.* For, as hath been ſaid, without the exiſtence of ſuch a Being, all theſe go out in everlaſting darkneſs. I might farther obſerve, that in the late remonſtrances againſt this Deiſidemony, the Deity himſelf ſeems to be included, as one of thoſe ſpirits we need not ſtand in awe of : ſo that at any rate Atheiſm is better than to admit of a God who could do any thing but protect us in our folly, or who could puniſh our acting againſt the law of our nature, reaſon. But of this elſewhere.

which

which is therefore the ſureſt conviction (*k*). And in ſome caſes the experience of one man becomes that of another; as when we ſee people ſtart, cry, get up, lay about them, and do abundance of other extravagant actions in their ſleep. *Lucretius*, in a place cited before, ſays,

Tollunt clamores, quaſi ſi jugulentur ibidem:
Multi depugnant, gemitúſque doloribus edunt.

However this humour of telling vain ſtories is the reaſon that a man cannot give ſuch inſtances, as conſiſt with his own knowledge, or might otherwiſe be depended upon; becauſe however true, they have ſomething in telling, that ſavours of the chimney-corner: and therefore I have purpoſely avoided even ſo much as the mentioning them. And though the examples given by *ancient Authors*, will better bear telling, as having ſtood on record for many ages; yet I have declined laying the ſtreſs of the argument on theſe. That reaſoning is moſt convincing, which is moſt univerſal, and draws neareſt the experience of every body. Yet I ſhall venture ſometimes to mention *theſe laſt:* but ſtill, without inſiſting on the certainty of the particular facts, only hypothetically, and ſo far as they are not impoſſible to happen, nor unlike to what does ſtill happen at this day. Some of them are ſingular; and great events have been conſequent upon them; a qualification which ſtill puts them farther beyond exception: and generally this is the reaſon why they are at all tranſmitted to poſterity. It had been childiſh to have inſerted any thing of this kind without ſome ſuch reaſon, and as it had a relation to the events treated of. But if there had been any thing unnatural, or abſurd in them, they would have been entered with a *note*; as the more judicious ſort of Writers always do traditions ſeemingly fabulous.

XXXV. But there are other more material Objections againſt this concluſion; it may be ſaid, That ſince many bodily diſtempers are accompanied with ſtrange contradictory ſcenes of viſion, even while we are awake, they ſeem rather to proceed from the diſorder of the brain, than to be excited by immaterial Agents; or if we ſhould allow that they are ſo

(*k*) I can't help thinking it would be well if we were a little more curious in examining thoſe inſtances that happen to ourſelves, and weigh the particular circumſtances of *ſpontaneity, life, language*, againſt the *inertia* of matter, or the *inflexibility* of mechaniſm, and this perhaps would convince us at home.

excited, thoſe Beings muſt be very trifling, idle, abſurd, ignorant, weak; or ſuch as we cannot well conceive ſeparate ſpirits to be. That it is abſurd to ſuppoſe ſuch Beings buſied in ſuggeſting imaginary phantoms even to brute-animals, as we muſt ſay they do, if this concluſion be juſt with reſpect to men. That the moſt part of the things we fancy we ſee in ſleep, are ſo wild and inconſiſtent, that one cannot help thinking chance hath a great ſhare in their production, *&c.* To ſpeak to each of theſe ſingly, we may obſerve firſt in general, that there are few truths, except thoſe ſeen intuitively, againſt which objections, founded on ſeeming probability, and old prejudices, may not be raiſed; if we ſuffer the reaſons to ſlip out of our mind from which they were concluded, and retain in view only our former way of thinking about them. It is an eaſy, but a fallacious method, to run away with a flux of words: we may draw up ſuch a ſpecious ſhew of *probabilities*, ſupported by prejudices, as ſhall make a dreadful appearance taken all together; and yet turn to nothing at laſt, when *examined* and *ſifted* ſeparately. When an *exact Perſon* makes objections for the love of truth only, he will be ſevere in examining his own objections in the firſt place, and endeavour to throw them into the rigorous form of an argument, proving all his aſſertions as he goes along, and not expect that any thing ſhould be allowed him, purely becauſe he is on the objecting ſide. When we take this way, we generally ſave ourſelves and others a good deal of trouble, by finding out where the miſtake lay. For it is a ſure principle to truſt to, *That two contradictory aſſertions cannot both be true*; and if we can find no fault in the reaſons that eſtabliſh the concluſion on the contrary ſide, we ſhould ſuſpect our own objections. Thoſe indeed are the moſt promiſing objections, that attack directly the reaſons on which the thing is founded; but if they leave theſe ſtanding, and turn to *by-conſiderations*, much is not to be expected from them. In that caſe, *viz.* when a concluſion is founded on ſuch reaſons, as are liable to no exception; and difficulties from other conſiderations are only offered: it follows from the *conſiſtent nature* of all truth, and the *neceſſary harmony* between all true propoſitions, that ſatisfaction enough is given them, if it can be ſhewn, that it is poſſible and conſiſtent enough, that the thing objected may be for ſuch a reaſon, and in ſuch a manner; though it cannot be poſitively ſaid, or proved, that it is for this very reaſon, and in this particular manner. The point then comes to this. Such a circumſtance or appearance, which is on all hands allowed to be real [as that many of our dreams are chimerical and wild] would

would not be, if ſuch a concluſion as is pretended to be eſtabliſhed [to wit, that they are exhibited by ſeparate ſpirits] were true. And in anſwer to this, a poſſible and conſiſtent reaſon is given, why it might be ſo, notwithſtanding this concluſion; and a manner is ſhewn, in which it might ſo come to paſs; though it cannot be proved, that this is the very manner, or that the very reaſon. Then it follows that the appearance, contended to be inconſiſtent with the concluſion, is conſiſtent with it *more ways than one*; on ſuppoſition that the reaſon given, or manner ſhewn, is not the real reaſon or manner that obtains. And a thing that is poſſible *two ways*, cannot be impoſſible. It was but neceſſary, in ſuch an intricate ſubject, to premiſe thus much concerning the nature of objections to a legitimate concluſion. The deſign of all reaſoning whatſoever (as was hinted above,) is in order to avoid contradiction; and if denying the cauſe aſſigned of the preſent phænomenon, forces us upon it; to have recourſe, to wit, to the *powers* of *dead matter*, or of *mechaniſm*, for the appearances of life; or to ſuppoſe that effects may be perfecter than their cauſe; to raiſe objections here will not appear ſo eaſy to a conſidering perſon.

XXXVI. From theſe conſiderations, a general anſwer might be given to the difficulties mentioned; for unleſs it could be ſhewn that this inſtance here argued from, is ſuch as never happens to any man; or that the reaſoning upon it is faulty; neither of which, it is preſumed, can be done; it will follow, ſuch difficulties notwithſtanding, that in this, and ſuch other like inſtances, the agency of ſeparate ſpirits is plainly neceſſary; which is the chief thing aſſerted. And, as was argued N° 10. if we could be certain that ſuch an inſtance had happened *but to one man*, and that *once* only; the concluſion would ſtill be certain, with reſpect to that one inſtance; that ſome living, inviſible Being effected it, and therefore exiſted. *A contradiction once happening*, is itſelf a contradiction. Nay, let it be obſerved, though a Sceptick could fairly prove, that in other examples, not thus qualified, another cauſe obtained; even this would not invalidate the concluſion made. For reaſon would always force the ſame inference, from the ſame conditions and circumſtances, whatever might be in other caſes. And any one will readily allow, that the inſtance here aſſigned (or rather that part of an inſtance) draws nearer to the common and ordinary ſort of dreams, than to thoſe that are very clear and ſignificant. We frequently dream that we are in company with other men,

who

who act and ſpeak like men. This adds the appearance of *language* and *rational action*, to life and ſpontaneity. But that which will determine a man, who conſiders this affair juſtly, and hath an eye always upon the *inertia* of matter; to aſcribe all the ſcenes offered to us in our ſleep, to the ſame cauſe, is, That matter is as little capable of *ſpontaneity* and *life*, as of reaſon itſelf. The impoſſibility of its ever becoming a *ſelf-moving ſubſtance*, was that which we firſt diſcovered concerning it. And every thing that we hear or ſee in ſleep, is full of *ſpontaneity* and *action*; if not of reaſon. Let any one explain to me, how the particles of the ſenſory could, of themſelves, and without external impulſe, repreſent *an animal purſuing us*; a *crawling ſerpent*, or *flying fowl*. And the particles of the ſenſory, if any thing, muſt do it; for it is that to which the ſoul is united, and which communicates the impreſſions immediately to the ſoul. Let him not tell me of *mechaniſm*, or *chance* here; for it is abſurd to ſpeak of them; upon the ſame account as it would be abſurd to aſcribe the *real motions* of the living creatures themſelves to theſe principles. It is the ſpontaneous principle that we want, the neceſſity of which makes us allow an *immaterial Mover* to every living thing. But farther; if we have a viſion repreſented to us, where there are *rational agents*, or men; brute, or *irrational creatures*; together with a *ſcene* or ſyſtem of *inanimate things*; as every repreſentation muſt have a place, or ſcene where it exiſts: we cannot ſay that inviſible Beings form and exhibit only the *two firſt* particulars, (the rational and ſpontaneous parts) and leave the ſoul itſelf, or chance, or mechaniſm, to form the inanimate parts, or *ſcene of action*. All is, as it ſeems, the work of the ſame agent, and exhibited at once. Therefore I think it was extremely accurate in *Ovid*, to aſſign a third Deity, who ſhould repreſent immovable rocks, ſtanding foreſts, running waters: ———

Ille in humum, ſaxúmque, undámque, trabémque,
Quæque vacant animâ, feliciter omnia tranſit.

And if we ſhould conſider *the exhibiting of monſters*, and things quite without the verge of exiſtence, the difficulty of finding another cauſe for them is not leſſened but increaſed, as they recede farther from the courſe of nature, and ſtated laws of mechaniſm: yet theſe are made the main arguments for chance. Thus we ſee the philoſophical conſideration of dreams doth not ſo much regard, whether they are conſiſtent ſchemes, according

to

to the courſe of nature, as *the impoſſibility* of their being phyſical productions. There is enough in the moſt incoherent of our dreams, or even in a part of theſe, to ſhew that they are things quite above the powers of matter or mechaniſm. Nor is it philoſophical, I think, to ſeek for different cauſes of the ſame kind of appearance, though the ſeveral inſtances may not be all alike. It is a *maxim* in philoſophy, when effects are all of one kind, though perhaps not equally perfect in degree, that they proceed all from the ſame kind of cauſe (*l*). Artiſts equally good might produce pieces of work unequally perfect, for a thouſand reaſons that could be named. Often we ſee a cauſe confeſſedly the ſame, produce effects not equally perfect. From this we would not infer, that ſome pieces were the effect of art, and others of chance. And often the nature of the thing produced doth not require ſo much skill to be employed. Thus to inſtance in the preſent caſe, from the ſame deſcription of *Ovid*; we may conceive leſs art is neceſſary to his *third Deity*, to repreſent to the fancy in ſleep, mountains, houſes, rivers; than to the *ſecond* to exhibit the motions and *ſpontaneity* of animals, though mute: but that it is ſtill harder than either of theſe for the firſt, to repreſent men *ſpeaking* and *acting* like rational creatures.

XXXVII. As to what is urged, that bodily diſtempers may be the cauſe of theſe repreſentations, enough hath been ſaid already (*m*). *No man* can ſeriouſly perſuade himſelf, whatever he may ſay, that the ſimple indiſpoſition of the brain, or any other part of the body; that is, a mere *diſarangement* of material parts, can be a ſufficient cauſe, why a ſcene of viſion is obtruded on the ſoul, where there is life and reaſon: nor doth he really underſtand himſelf when he ſays ſo. How, I pray, is it poſſible that the mere diſarangement of the parts of matter ſhould perform this; when it hath been ſhewn abſolutely impoſſible, that any arangement of them ſhould perform ſuch an effect? But what ſtrange cauſes have men adopted into their philoſophy! We could then be certain of nothing, if a *defect*, the

(*l*) *Effectuum naturalium ejuſdem generis eædem ſunt cauſæ: ut deſcenſus lapidis & ligni ab eâdem cauſâ procedit, &c.* Introduct. ad ver. Phyſ. Lect. 8. Axiom. 6. Every body would allow that ſome dreams are exhibited to the ſoul by inviſible Beings; but that others are the effect of ſome other thing (they know not what:) This, though enough to my purpoſe, is not enough in philoſophy, I preſume, if the reaſoning in this paragraph is right; which therefore ought to be well conſidered.

(*m*) See the note (*n*) in this; and (*b*) in the laſt.

utter

utter negation of a cauſe, could perform things of ſuch a high nature. It is true, theſe viſions are oftenest (though not always) obtruded on the fancy, when the body labours under ſome previous diſorder: but let me ask; Is it not quite a different thing for theſe ſcenes of ſpontaneity and life to be effected *purely by the diſorder*, and to be exhibited to the ſoul only *upon the occaſion of the diſorder?* Or is it leſs contradictory, that they ſhould be produced without a ſufficient cauſe, when the body is indiſpoſed, than when it is otherwiſe? And what ſhall we ſay, when they are effected without any previous diſorder? Both *order*, and *the want of order*, cannot be the cauſe.

XXXVIII. This, if duly attended to, will ſatisfy us, that the indiſpoſition of the body can as little produce theſe viſions *while we are awake*, as while we ſleep, or rather leſs; ſo that an *Objector* ſeems to argue with more diſadvantage in bringing in this as a *parallel caſe*, to ſhew that our dreams proceed from a bodily diſtemper. But to apply the argument particularly: it follows from what has been ſaid, that if a man, under an indiſpoſition of body, from what cauſe ſoever it may ariſe, ſhould ſee what other people about him do not ſee, and cannot ſee; if the object ſeen is ſuch, as cannot be produced without a living ſpontaneous cauſe; if he ſees it with fright and reluctancy, and if it gives him uneaſineſs and pain, ſo that the ſoul itſelf cannot be this cauſe; provided, I ſay, he ſees it ſo, and ſuch, it follows from the reaſoning above, that a *living intelligent Cauſe* as certainly tampers with his organ *then*, and makes theſe impreſſions upon it, and maintains them there, notwithſtanding the action of external objects upon it at the ſame time, as if the ſame thing happened to him in his ſleep only. If the thing ſeen be of that kind, and hath all the conditions requiſite to infer the concluſion concerning a viſion ſeen in ſleep, the circumſtance of *being awake* can make no alteration, nor change the neceſſity of the reaſons in the former caſe; it only requires a greater degree of the ſame kind of power to be exerted: or rather the circumſtance of being awake makes the concluſion more evident and plain in this laſt caſe; for then we have our memory unclouded, and all our former ideas and experience, to have recourſe to, whereby to diſprove (as we might think) the reality of the objects offered, as exiſting *ab extra*; and it is common for perſons in ſuch circumſtances, to reaſon conſiſtently enough about ſuch other matters, as have no relation to the thing in queſtion: whereas in ſleep we are deprived of thoſe helps, by

the nature of that indiſpoſition. Now, as it would require greater art and cunning, to impoſe on a man of judgment and ſenſe, than to deceive an unexperienced infant: ſo in the circumſtance of being awake, it is evident more power muſt be exerted, and that leſs than the cauſe aſſigned could not produce the effect. Thus it is eaſily conceivable that theſe viſions might be offered to the ſoul, not only while we ſleep, but while we are awake, (as the objection ſuppoſes) and not only while the body labours under ſome indiſpoſition, but while it labours under none: and that they may conſiſt of one particular object ſeen, and for a ſhort time; or of greater variety, and for a longer ſpace; ſo that theſe Beings could tyrannize over the ſoul, and maintain their illuſions ſtubbornly, the body being no way previouſly indiſpoſed. And yet we call this *madneſs*. The words *deſipere*, *delirare*, *inſanire*, carry with them a ſort of imputation on the ſoul itſelf, as if it fell into thoſe diſorders through ſome fault in its own conſtitution. The perſons ſo affected meet with contempt inſtead of pity: but who can promiſe himſelf immunity? As I ſaid above, he hath not rightly conſidered the affair, who thinks he could ſtand his ground.

Sic temere in noſmet legem ſancimus iniquam.

The ſoul in itſelf is an uncompounded, ſimple ſubſtance, and hath no parts, and therefore properly *no conſtitution*, neither is it liable to *any change* or *alteration* in its own nature, (Sect. 3.) The *inert matter* of the body could never affect it thus. That could only *limit* its faculties *farther* and *farther*, or deaden its activity, (Sect. 4.) but not animate it after ſuch a *terrible* manner. Hence there is no other way of accounting for its being affected *in this* manner, but by the *cauſe* I have already aſſigned; unleſs men would run up to the very *firſt Cauſe* for effecting the preſent phænomenon. See the argument in N° 29. Let them chuſe. Thus theſe material ſenſories, to which, in the opinion of ſome, we owe the perfection of rational thinking, ſubject the ſoul to terrible accidents (*n*).

XXXIX. But

(*n*) Some things only tranſiently hinted at in this paragraph, would carry one a great way in ſpeaking intelligibly concerning the diſorders *our reaſon* is ſubjected to from ſome *external cauſe*; but any man, who is not ſtill *head-ſtrong* in aſcribing diſproportionate effects to certain imaginary powers in *matter* and *mechaniſm*, may from what is ſaid, reaſon conſiſtently concerning the ſeveral caſes that might be objected, without ſuffering himſelf to be entangled with ſceptical arguments. There is indeed a great difference, and variety, in the ſeveral *phænomena* of *reaſon diſturbed*; but univerſally, the *diſeaſe* could not be lodged in the ſoul itſelf: nor could the *matter* of the body

XXXIX. But farther, *the tranſition from* one of theſe ſtates to the other, ſeems almoſt to lie, I think, within the reach of our conception. It is matter of fact, and we need not be afraid of being deceived, when we allow it, that ſome people *riſe* in their ſleep, and *do certain actions*; that they *ſpeak*, *threaten*, *fall a fighting*; without being awakened with all the motion they give themſelves; and that they are with difficulty brought to themſelves again, even though their eyes are wide open. (See the Note (*f*), N° 5.) Now this can proceed from nothing elſe but a ſcene of viſion's being ſtrongly printed on the imagination, and obſtinately maintained there, by ſome living intelligent Being, notwithſtanding that external objects act upon the ſenſory at the ſame time. And if the power of ſuch a Being is unreſtrained, it will equally poſſeſs the fancy with theſe deluſive ſcenes, without waiting for the occaſion of ſleep to introduce them; and obtrude them forcibly upon the organ, amidſt the action of external objects. For it requires but a greater degree of the ſame power, to make *deluſory impreſſions* upon the ſenſory, while real external objects are making *true impreſſions* upon it; than it would require to make the ſame impreſſions, while no other impreſſion from external objects is made upon it at the ſame time. If one is made to ſee in his ſleep a man purſuing him with a drawn ſword; there are certain *proper vibrations* excited in the optick nerves, or ſuch impreſſions made upon that part of the brain, on which the optic nerves act, as if theſe vibrations were excited in them. And if the ſame vibrations are *more powerfully* excited in the optic nerves, while the eyes are open, *than thoſe* excited by external objects then acting, the man purſuing with the drawn ſword will ſtill appear, even though the eyes be open (*o*). And thus by eaſy ſteps we ſee, *that*

affect it any other way than by *deadening* its activity, which, I think, is never the caſe in theſe appearances. In ſhort, the diſorder of matter might make a man a *ſtupid Ideot*, ſubject him to *ſleep*, *apoplexy*, or any thing approaching to its own nature; but could never be the cauſe of *rage*, *diſtraction*, *phrenſy*, unleſs it were employed as an inſtrument by ſome *other cauſe*, *i. e. it cannot of itſelf be the cauſe* of theſe diſorders of reaſon. If the *inertia* of matter infers any thing, it infers thus much. And all this together, conſidered equitably, vindicates the rational nature of the ſoul from depending on matter for its perfection, or any other way, than as it limits its faculties, or may be made an inſtrument to diſturb it.

(*o*) *Ariſtotle*, though in this whole affair he aſſigns a different cauſe from that here given; yet he deſcribes the formal manner, why *ecſtatic perſons* (as he calls them) ſee what others do not, and cannot ſee, nearly the ſame way: becauſe, to wit, the ordinary motions in the ſenſory are overcome,

that dreaming may degenerate into poſſeſſion; and that the cauſe and nature of both is the ſame, differing only in degree: for *dreaming* is but *poſſeſſion in ſleep*, from which we are relieved again when we awake, and external objects begin to ſolicit the perceptivity through the ſenſes: but the other poſſeſſion is more ſtubborn, and not to be diſplaced ſo eaſily. We may conceive, when ſuch a Being is allowed the aſcendant over our ordinary ſenſations and ideas, it will keep up that power as long as poſſible. There is ſomewhere, I think, in Dr. *Tillotſon*'s ſermons, a pious reflexion to this purpoſe, "That if our imaginations were let looſe upon us, we "ſhould be always under the moſt dreadful terrors, and frighted to diſ-"traction with the appearances of our own fancy: but that an over-"ruling Power reſtrains theſe effects." Now it is not eaſy to conceive what can be meant by not *letting our imaginations looſe upon us*, unleſs it be underſtood of reſtraining the power of theſe inviſible Beings, which would otherwiſe inceſſantly diſtreſs the ſoul with ſuch unpleaſing ſights. If the matter of fact in the beginning of the paragraph, from which this tranſition is made appear conceivable, ſhould be conteſted, or denied, though *Lucretius* himſelf vouches the like inſtances *(p)*; yet taking it only as a bare poſſible *ſuppoſition*, contrived on purpoſe to argue from, the reaſoning on it as a *ſuppoſition*, will be ſtill as intelligible, as if it were real; and the degenerating of the one appearance into the other equally poſſible to our way of conception; which is all that is intended by it. For it is by no means pretended that this may be the only way, by which ſeparate ſpirits may affect us in our preſent ſtate.

overcome, and drowned as it were, by foreign motions; of which therefore theſe perſons are chiefly ſenſible. Τῷ δ' ἐνίοις ἐκστατικῶν προσῆκεν, αἴτιον· ὅτι οἰκεῖαι κινήσεις ἐκ ἐνοχλοῦσιν, ἀλλ' ἀποπίζονται· τῶν ξενικῶν οὖν μάλιστα αἰσθάνονται. And a little below of *melancholic perſons*, he ſays, Οἱ δὲ μελαγχολικοὶ, διὰ τὸ σφόδρα (ob vehementiam) ὥσπερ βάλλοντες πόρρωθεν ὑποχοί εἰσι (he had been ſpeaking of ſuch as are εὐθυόνειροι); the reaſon is——Διὰ τὴν σφοδρότητα ἐκ ἐκφέρεται. αὐτῶν ἡ κίνησις ὑφ' ἑτέρας κινήσεως. Which is as much as to ſay, the ſtrongeſt impreſſion predominates. But what is wonderful here is, that *Ariſtotle*, believing there were ἐκστατικοὶ and εὐθυόνειροι, ſhould offer to account for this mechanically. He might as well have ſaid, that the reaſon in natural philoſophy, why ſome men are rich, and others poor, is *the different colour of their beards!*

(p) Multi depugnant, gemitúſque doloribus edunt:——

And

Vix ad ſe redeunt, permoti corporis æſtu.

XL. What

XL. What is here ſaid with reſpect to the objects of *ſight*, is eaſily applicable to thoſe of *hearing*: theſe inviſible Beings have the ſame power over the ſenſe and organs of hearing, as they have over thoſe of ſeeing. In ſleep we as well hear words and ſentences ſpoken, as ſee objects of ſight repreſented; and it is as conceivable how our dreams ſhould degenerate into poſſeſſion, in this reſpect, as in that. Therefore I ſhall venture farther to ſay, that ſome of thoſe relations of apparitions we meet with in *Hiſtorians*, whether the facts be true or falſe, have nothing inconſiſtent in the telling. For thoſe ſpirits may, upon ſome important occaſions, be licenſed ſo to affect the ſenſory, according to the exigency of the affair, that all the ſcene of viſion, which is then thought to have an exiſtence from without, may be the effect of impreſſions made on the brain only. Thus, for inſtance, that apparition mentioned before, which *Plutarch* tells us was offered to *Brutus*, before he came over from *Aſia*, and came again to him the night before the battel of *Philippi*; which is there deſcribed as a *dreadful ſpectre*, of a *monſtrous and ugly appearance*; and *that noiſe* which he heard as of one entering his tent; and *theſe words* it is ſaid to have ſpoke to him, "I am, O *Brutus*, thy evil Genius; but "thou ſhalt ſee me again near *Philippi* (*q*);" might all be but inward repreſentation upon the ſenſory: and any other perſon preſent might neither have heard or ſeen any thing. However, this is ſuggeſted as probable only, or eaſily conceivable, from what is ſaid above of the like ſpectres and viſions offered to us in our ſleep; and the eaſy tranſition there is, from making us ſee them in ſleep, to the making us ſee them while awake; and becauſe this is more conformable to our own experience and to philoſophy, than the aſſuming condenſed bodies of air. Yet it is not meant as if there were any thing inconſiſtent even in that ſuppoſition. Either of theſe ways is more conceivable, than that by which his friend *Caſſius* accounted for this viſion the next morning, when *Brutus* went and conſulted him upon it, from the notions of *Epicurus*, in which there is

(*q*) *Brutus* was ſitting in his tent, muſing, and conſidering ſomething with himſelf, when he thought he heard ſome body entring; and upon looking about he ſaw δεινὴν καὶ ἀλλόκοτον ὄψιν ἐκφύλου σώματος, σιωπῇ παρεστῶτος αὐτῷ: and aſking unconcernedly, What *Being* it was, *God* or *man*; and what it wanted with him? The ſpectre anſwered, ὁ σὸς, ὦ Βροῦτε, δαίμων κακός· ὄψει δέ με πρὸς Φιλίπποις.

nothing

nothing intelligible, and ſome things contradictory (*r*): or the way that *Hobbes* hath accounted for it ſince, who makes *cold produce dreams and viſions of fear*, without either reaſon or experience to ſupport his aſſertion; and for no other end, I think, but to obviate this difficulty (*s*). For, as was argued juſt before, (N° 37.) allowing that we ſaw terrifying and fearful objects, only when we were cold, which yet is the moſt unſupported aſſertion imaginable; is it not quite a different thing, that thoſe objects ſhould be exhibited to the ſoul, by a deſigning intelligent Being, upon the occaſion of cold; and that they ſhould be produced *by cold*, as an *efficient* cauſe?

(*r*) Ἅμα δ' ἡμέρᾳ τραπόμενος πρὸς τὸν Κάσσιον, ἔφραζε τὴν ὄψιν· ὁ δὲ, τοῖς Ἐπικούρου λόγοις χρώμενος, καὶ περὶ τούτων ἴδιος ἔχων διαφέρεσθαι πρὸς τὸν Βροῦτον. Ἡμιτέρους οὗτος (εἶπε.) ὦ Βροῦτε, λόγους, ὡς ἃ πάντα πάσχομεν ἀληθῶς, εὖ ὁρῶμεν, κ. λ. As if the ſoul did not ſuffer, what it thinks it ſuffers; or had not the ideas it hath. And afterwards he ſays, the ſoul of man hath in itſelf both the art, and materials, to make ſuch viſions; as if it acted, without knowing it acted; or abſurdly laid a plot to terrify itſelf; as hath been argued before. Surely this viſion was but a bad inſtance to apply *Epicurus*'s notion to, and yet this is in part the notion that ſtill obtains. It is that which *Cicero* falls in with, which was ſpoken to before; ſo that more needs not be ſaid of it.

(*s*) "And ſince dreams are cauſed by the diſtemper of ſome of the inward parts of the "body; divers diſtempers muſt needs cauſe different dreams. And hence it is that lying "cold breedeth dreams of fear, and raiſeth the thought and image of ſome fearful object "——We read of *Marcus Brutus*, &c." *Leviath.* ch. 2. He makes *Brutus* to be ſleeping; but *Plutarch* tells us, he had ſlept the firſt part of the night, immediately after eating; and had riſen to digeſt ſomething in his own mind. So that it had the diſadvantage to *Hobbes*'s ſcheme of being *a waking viſion*, and that without any previous diſtemper outward, or inward, that we read of. But it is convenient ſometimes to wreſt a circumſtance. *Dion* alſo was ſitting meditating and thoughtful, in the porch of his own houſe, when the ſpectre appeared to him.

I ſhall give the relation of it in *Plutarch*'s own words, ſince there is ſomething very ſtrange and remarkable in it. It happened while the Aſſaſſins were contriving his death, a little before he was cruelly murdered —— Συνισαμένης δὲ τῆς ἐπιβολῆς (ſays the Author) φάσμα γίνεται τῷ Δίωνι μέγα καὶ τερατῶδες· ἐτύγχανε μὲν γὰρ ὀψὲ τῆς ἡμέρας καθεζόμενος ἐν παστάδι τῆς οἰκίας, μόνος ὢν πρὸς ἑαυτὸν τὴν διάνοιαν· ἐξαίφνης δὲ, ψόφῳ γενομένῳ πρὸς θατέρῳ πέρατι τῆς σοᾶς, ἀποβλέψας, ἔτι φωτὸς ὄντος, εἶδε γυναῖκα μεγάλην, σολῇ μὲν καὶ προσώπῳ μηδὲν ἡμῶν τραγικῆς παραλλάττουσαν, σαίρουσαν δὲ καλύπτρῳ τινὶ τῶν οἰκίαν· ἐκπλαγεὶς δὲ δεινῶς καὶ περίφοβος γενόμενος, μετεπέμψατο τοὺς φίλους, καὶ διηγεῖτο τὴν ὄψιν αὐτοῖς· καὶ παραμένειν ἐδέετο καὶ συννυκτερεύειν, παντάπασιν ἐκφατικῶς ἔχων, καὶ δεδοικὼς μὴ πάλιν εἰς ὄψιν αὐτῷ μονοθέντι τὸ τέρας ἀφίκηται.

It was far from being *Dion*'s character to be eaſily ſhaken and diſpirited; and his being in ſuch dread leſt the viſion ſhould appear to him again, and his begging his friends, to remain with him in the night-time, hath ſomething terrible in it. Men who do not fear death, may yet *fear ſomething* more than death itſelf. What is it that puts the ſoul in ſuch an

cauſe? Cold is but a mere want of ſome thing requiſite, retarding the briskneſs of the motions in our bodies. *Heat* would have been a more probable *cauſe*. *Indeed, not the philoſophy of the Sceptick alone, but of the generality of men, is full of negative efficients!* It would not, I think, be a greater abſurdity, if we ſhould ſay that a horſe, if he be ſound, can but *walk*, or *gallop* at moſt: but if he be lame, it is not impoſſible that he may ſometimes *fly!* For it ſeems equally abſurd, to ſuppoſe that our bodies, which when beſt diſpoſed can only be moved mechanically, ſhould, by their indiſpoſition, become the cauſe of *life* and *ſpontaneity*.

XLI. As to the particular, Why theſe terrifying objects ſhould be frequently exhibited to the ſoul, when the body labours under ſome diſorder; reaſons

an *agony* in theſe caſes? Or why ſhould they happen before *bloody* and *tragical events?* Or not happen at the approach of natural death? Let one of thoſe men, who affect to call themſelves *ſtrong ſpirits* [*les eſprits forts*] ſuppoſe himſelf in *Dion*'s place, and then think whether he could be proof againſt terror from ſupernatural *cauſes*. Did never a dream ſhake him, diveſt him of all his boaſted intrepidity and firmneſs of ſpirit? If ſo, he may draw a conſequence from hence, how little the human ſoul could be a match for *certain Cauſes* that may be in the Univerſe. He hath not taken the juſt meaſure of his own courage, who thinks he could be a match for *any thing:* and yet he who reckons all terrors *falſe* and *vain*, ought to think himſelf a match for *every thing*. I own *chance* and *atoms*, or an *unguided world of matter*, is but an unpleaſing proſpect at beſt; and a man who was ſeriouſly perſuaded of ſuch a world, would need no ordinary ſtock of courage on many occaſions; but in ſuch *diſtreſſes*, theſe Philoſophers begin to think of their Adverſary's arguments, and wiſh at leaſt that they may be true, which ſhews they are not proof againſt *the fears* of their own ſcheme. But there is ſomething more dreadful, than *chance* and *atoms* ſtill behind. In a word, there is a great difference between the fear of Death, and *other kind of fears* which the ſoul may feel, and is often ſubjected to; and which all the fortitude of human courage is not able to ſtand, let men boaſt as they will. Otherwiſe let them ſhew me how it is poſſible, that the ſoul may remain *unterrified* even in a dream; or that it may not be placed in as weak and dejecting circumſtances while we are awake. A *man* may bravely fight his *Enemies*, and not be conquered even in death; but in the caſe we are ſpeaking of, there is no kind of Arms with which we could defend ourſelves, and our fright proceeds from finding ourſelves *every way* in the power of *ſome Being* ſuperior to us.

I know not how Mr. *Hobbes* would have accounted for *this inſtance*, if he had tried his hypotheſis upon it. *Dion* was awake when this happened to him, and thinking on ſomething quite different from that which ſo ſuddenly ſurpriſed him. Theſe circumſtances, and the character of the man, far from having a weak or viſionary head, make it difficult to find an evaſion. No men in antiquity are leſs liable to the ſuſpicion of weakneſs and credulity, than *Brutus* and *Dion*; or rather farther removed from thoſe *follies*, the Sceptick ſeems to complain of. *Plutarch* ſays they were Ἀνδρες ἐμφρονεστατοι και φιλοσοφοι, και πρὸς ἑαυτους ἀκροτατα ἀλλ' οὐδ' εὐπαθεστατοι παθειν.

neither

neither contradictory, nor improbable might be offered; which therefore, from the conſiderations in N° 35. take off the weight of this ſcruple. Theſe ſpirits may poſſibly be under a reſtraint, and wait only an opportunity to gratify their enmity to us. Let us conſider the diſeaſe called the *Incubus*, or *night-mare*, which many perſons are tormented with in their ſleep (*t*). It is generally accompanied with frightful, ghaſtly appariſions, which are then obtruded on the imagination; ſo that the *party* is made to fancy that the diſtemper itſelf proceeds from *their* preſſing him down with a weight like to ſtifle him. And for this very reaſon, the *Latins* call this diſorder the *Incubus*; as if we ſhould ſay, *the overwhelmer*, or *oppreſſor:* and the *Greek* name, ἐφιάλτης, imports much the ſame thing. And this, I believe, is allowed to be a caſual diſtemper of the brain, by which the animal ſpirits are obſtructed. But now the bodily indiſpoſition here, and the diſagreeable viſion made to accompany it, are *two very different things:* and as it would be abſurd to make the *diſorder* of the material organ the *efficient cauſe* of the apparitions that are exhibited along with it; for theſe are often *ugly phantoms*, which to fright us the more, appear to have bad deſigns upon us, threaten us, wreſtle with us, get us down, all which infer a deſigning, intelligent cauſe: ſo, their being exhibited along with it, and adapted to it, ſhews us, I think, that theſe Beings wait for, and catch the opportunity of the indiſpoſition of the body, to repreſent at the ſame time ſomething terrifying alſo to the mind. Farther, we may obſerve, that the more pregnant inſtances, where people are ſubjected to illuſions of the fancy, and ſuch things as diſorder their imagination, generally happen after the brain hath been diſcompoſed with *anger*, *fear*, *diſappointment*, or other violent paſſions; unqueſtionable examples of which might be given, if one needed to aſſign them: but they occur to every man's own obſervation. And it is, I think, becauſe the previous indiſpoſition generally gives an opportunity to theſe Beings to affect the imagination, that the *diſorder of the brain* ſtands in common diſcourſe, for this *conſequent trouble*; and that we reckon it the efficient cauſe of theſe viſions, having nothing readier to ſay. I ſhall venture to give an inſtance, which ſeems to confirm this, related both by *Plutarch*, in the life

(*t*) See the word *Ephialtes*, in Mr. *Chambers's Cyclopedia*, or *New Dictionary*; where an account of a ſurprizing inſtance of this diſeaſe is given. *Macrobius* ſays of it——*In hoc genere* [*ſomniorum*] *eſt* ἐφιάλτης, *quem publica perſuaſio quieſcentes opinatur invadere, & pondere ſuo preſſos ac ſentientes gravare.* In ſom. Scip. lib. 1. cap. 3. He means the ugly phantoms, which are made to accompany the pain felt.

of *Antony*, and *App. Alexandrinus*, in his hiſtory of the *Syrian War*, (if the latter may be reputed a different work.) *Antony*'s army in their return from *Parthia*, were in great ſcarcity of proviſions; and among other roots and herbs, which their neceſſity forced them to have recourſe to, without knowing their natures, they eat of a certain *poiſonous herb*, after which they became delirious, with this particular kind of phrenſy, that, forgetting all other kind of buſineſs, they thought it of the laſt conſequence, to turn over, and dig up all the ſtones they could find in their march: and the Hiſtorians ſay, *the whole field was filled with the ſoldiers, bowing down, digging up, and removing the ſtones (u)*. And in this occupation numbers of them miſerably periſhed. Now ſhall we ſay that this, or any other herb, had a quality to poſſeſs their minds with this abſurd notion? It is certain it could do nothing, beyond indiſpoſing their bodies, by a change of the parts of matter in them. Nor can this, or other like inſtances, I conceive, be accounted for, but by allowing that theſe Beings laid hold of the indiſpoſition, which the poiſon had wrought in their bodies, to occupy their minds with this ſtrange delirium.

Theſe conſiderations, together with what was mentioned before, N° 38. make it probable that ſuch Beings lay hold of the indiſpoſition of the body, to diſtreſs the ſoul, and inſult human reaſon, by occupying the imagination unnaturally: that the ſeveral kinds of *the diſorders of reaſon* (in which we ſuppoſe the ſoul itſelf to be diſtracted) are but the effect of this unnatural occupation, by ſpirits, who have not power enough to invade the quiet of the ſoul, till its organ be previouſly diſordered: that ſleep, whoſe firſt and greateſt effect it is to darken the region of memory, and all former impreſſions *(v)*, is one of thoſe diſorders which affords them moſt frequent opportunity, as recurring every night: that if it were not for the right diſpoſition of the organ at other times, and that the perceptivity

(u) ——Τραπόμενοι δὲ πρὸς λάχανα καὶ ῥίζας, —— ἥψαντό τινος πόας ἐπὶ θάνατον· διὰ μανίας γὰρ ἐγένοντο· ὁ γὰρ φαγὼν ἐδόκει ἐμέμνητο τῶν ἄλλων, ἐδόκει ἐγίνωσκεν, ἐν δὲ ἔργον εἶχεν, κινεῖν καὶ σκάπτειν πάντα λίθον, ὡς τι μεγάλης σπουδῆς ἄξιον πραττόμενος· ἦν δὲ μισὸν τὸ πεδίον κεκυφότων καμάζει, καὶ τὰς λίθας περιορυττόντων καὶ μεθιστάντων.

(v) I have before obſerved in the Notes *(c)* and *(d)* that *Lucretius* was gravelled to account how the memory ſhould be darkened, and yet a material ſoul be ſtill awake. He could not deny either part of the appearance, and at laſt is forced to break the knot which he could not looſe.

——*Cum*

tivity is regularly ſolicited and occupied by the natural action of external objects, they would never ceaſe to torment the ſoul: and that, even perhaps *at certain other times*, when the organ is not indiſpoſed, the curb that reſtrains their power may be taken off, for reaſons that cannot be but good and wiſe; ſo that, notwithſtanding the preſence of real external objects acting on the ſenſory, they may terrify the ſoul with unpleaſing ſights, viſible only to thoſe againſt whom they are thus let out; as the Poets tell us *Pentheus* and *Oreſtes* were purſued by viſible furies, the one for ſacrilege, and the other for parricide (*x*). Upon the whole then, as there are manifeſt contradictions in any other account that can be given; ſo there is in all this ſuch a degree of probability, as makes the mind reſt ſatisfied with the reaſonableneſs of the ſuppoſition, which is enough for taking off the objection in hand, according to the remark that was made N° 35. *The ſoul cannot have a diſorder lodged in itſelf, nor be ſubject to any diſeaſe*; a man who conſiders the ſimple nature of it, will never affirm this: and when he farther conſiders the only remaining way in which matter can affect it, which is by *deadening* its activity and powers; he will ſcarce be able to hinder himſelf from aſſenting to theſe ſeveral particulars (*y*). It is certain *theſe diſorders of reaſon* appear after *grief*, *love*, or ſome other *great diſappointment*

——*Cum jam deſiterint ea ſenſibus uſurpari*
At reliquas tamen eſſe vias in mente patenteis,
Quâ poſſint eadem rerum ſimulacra venire.

Lib. 4. ver. 971.

It is ſtrange to conceive ſome paſſages left open in the ſoul, while the reſt are ſhut; or how one part of a material ſoul ſhould be aſleep, and another awake. It ſeems the ſeveral parts of the ſoul relieve one another, ſleeping by turns; as the Poets tell us of *Argus*'s eyes,

Inde ſuis vicibus capiebant bina quietem:
Cætera ſervabant, atque in ſtatione manebant.

(*x*) *Eumenidum veluti* demens *videt agmina* Pentheus——
Aut Agamemnonius ſcenis agitatus Oreſtes,
Armatam facibus matrem, & ſerpentibus atris.
Cùm fugit; ultricéſque ſedent in limine diræ.

Virg. Æneid. lib. 4.

And again, though upon a different occaſion he expreſſes the ſame thought, ſaying

Apparent diræ facies, inimicáque Trojæ
Numina.——

Lib. 2.

(*y*) The ſoul can admit of no diſeaſe from matter, as having no parts to be diſordered. It can ſuffer no alteration in its own ſubſtance, if that ſubſtance is not annihilated, as was ſhewn in Sect. 3. And if it ſhould be contended, that a *ſimple ſubſtance* might be affected with diſ-

diſappointment have diſcompoſed the brain. And why ſhould they appear *then?*——When we conſider *that Cauſe* which is the *power*, [the *mover*] in all mechanical motions, whether regular or diſordered; there is no refuſing this concluſion concerning theſe Beings, without formally aſcribing the effect of *diſordering our reaſon*, to the very *higheſt Being*, as has been ſaid before. If the blood, or any other fluid, or matter in the body, moving after a new and unwonted manner, were the ſole cauſe of this diſorder, (which indeed is impoſſible to be conceived, if we call to mind what was ſaid above, N° 25.) the *firſt Cauſe* being the only *mover* in theſe motions, this abſurd and impious concluſion would be unavoidable.

And then, if the ſimple nature of the ſoul can admit of no diſorder, or diſeaſe in its own conſtitution; the power of medicine cannot be ſaid to cure it, as it cures the body: So that the inſinuation [*mentem ſanari, corpus ut ægrum, cernimus,*] is fallacious and equivocal in every reſpect; as was promiſed to be ſhewn in N°. 11. of the laſt ſection. Would it not be abſurd to ſay, *That the ſoul is mad every night, and that awaking in the morning cures it again of its phrenſy?* And yet there is as much reaſon to affirm this of dreaming, as of any other circumſtance it can be in. We are injurious in debaſing the nature of our ſouls all manner of ways. We would have the ſoul material: if it be not, yet we would aſcribe the perfection of rational thinking to matter: and if that cannot be granted, we would then have the ſoul capable of diſorder in its own conſtitution. But the ſeveral particulars above, if ſeriouſly conſidered, ought to correct our

eaſe, or diſorder, at leaſt *by immaterial Beings*, that would ſtill allow *theſe Beings* to be the cauſe of the diſorder, out of a too eager deſire to ſhew that the ſoul might be capable of diſeaſe in its own nature. We would have the ſoul to *grow up*, to *decay*, to *ſleep*, to *be mad*, to *be drunk*: who ſees not that all theſe are ridiculous fancies too groſs to be entertained concerning a *ſimple, uncompounded ſubſtance?* If the ſoul were mad, or had the diſeaſe lodged in itſelf; what could cure it again? The *virtue* of herbs perhaps! Theſe could only effect a change in the diſpoſition of parts, which it hath not. It would therefore ſtill remain under this diſorder, which muſt be *eſſential* (if I may ſo expreſs it) to its ſimple ſubſtance; and we could not conceive any alteration, rectification, or change wrought in it, but by the power of the Being who created it. Thus it would be incurable by the power of all *ſecond cauſes*: and that very argument brought to prove *that it is delirious and mad*, to wit, that it may be cured again, ſhews plainly, as it appears to me, that the diſorder is not lodged in itſelf; ſince then it would be incurable. And ſince dead matter could never affect it thus; there is *no other cauſe* left in the nature of things to produce this appearance, but that which I have aſſigned. It is a ſelf-evident truth *that, if a thing can admit of no change or alteration in its own nature, all change muſt be external to it.*

prejudices.

prejudices. The argument may be reduced to a narrow compaſs. The *inactivity* of matter infers the immateriality of an active living Being; the *immateriality* infers its *ſimple and uncompounded nature*; and its being ſimple and uncompounded infers *that it cannot be liable to any diſorder or diſeaſe in itſelf.* The diſorder of matter can only hinder its activity; and if we ſhould ſay, it may be affected with diſorder or diſeaſe from immaterial Beings, we incur the thing we would deny by this aſſertion.

XLII. That this notion of our dreams degenerating into a waking poſſeſſion is not entirely new, we may ſee from thoſe Authors, who have written on this ſubject before. Whatever way a man accounts for theſe two phænomena, he will readily give the ſame ſolution for both; there being ſuch an affinity between them. *Ariſtotle* makes but a very little variation of general hypotheſis, to account for that which he calls *ecſtaſy*; as hath been obſerved in N°. 38. and in this he ſays men foreſee things to come, as well as thoſe whom he calls ἐνθουσιάζοντες. The place is remarkable. And Mr. *Locke*, after giving a definition of dreams in his way, adds—"And whether that which we call ecſtaſy, be not dreaming with the eyes open, I leave to be examined." (z) By which way of ſpeaking it is plain, he thought them nearly related. *Hobbes* ſuppoſes the ſame viſions may happen to us *while waking*, as ſleeping; *viz.* in great diſtempers of the organs; and propoſes his ſolution of dreaming as including this particular caſe in it; of which below. And how explicite *Lucretius* is in this, hath been noticed above, N°. 10. of the laſt. *Et quæ res nobis vigilantibus obvia menteis terrificet*—Indeed fright and terror is the general concomitant of theſe appearances; for but few perſons, with *Horace*'s *Argive*, are entertained then with gay ſights, and pleaſing

(z) Having deſcribed ſenſation, remembrance, attention, he adds—"And dreaming itſelf "is, the having ideas (whilſt the outward ſenſes are ſtopped, ſo that they receive not outward ob-"jects with their uſual quickneſs) in the mind, not ſuggeſted by any external objects, or "known occaſion; nor under any choice or conduct of the underſtanding at all. And whether "that which we call extaſy, &c." Let *Ariſtotle*'s definition of a dream, that it is only the φαντάσμα, as in N°. 6. be remembered here; and it is as abſurd that the bare repreſentation, or things offered, ſhould be under the *conduct* or *choice* of the underſtanding, as it is that we ſhould ſee what we pleaſe only, when we look out of our window to the neighbouring fields. As to the ſoul's own thoughts in dreaming, ſee N°. 6. and what is cited from *Ariſtotle*. The ſoul reaſons full as conſiſtently, as an unexperienced ſtranger would do, about new and unknown objects,

objects,

objects. However *Lucretius*'s fear was lest the soul should not be dead enough; and he proposes his solution to cure that. Again, *Aristotle* would have us believe, that the illusions obtruded on the imagination, while the person is feverish, arise from mechanical motions excited in the sensory; by telling us that the living creatures sometimes seen then on the walls, are nothing but a few strokes, or draughts, which bear a distant resemblance (*a*). But he should have remembered, that we hear and see things then, though all is dark and silent round us. We put some questions, and answer others, as if somebody was talking with us. But have sounds their images to represent them, or are those images visible in the dark? Such circumstances plainly shew a cause more powerful than a few strokes on the wall of the chamber, dealing with the imagination. And in the former part of the paragraph, he assigns the like poor and unsatisfying reasons for distractions arising from *love*, *grief*, *fear*, *&c.* From hence then it appears, I think, that if *these Authors* had accounted for this phænomenon by the agency of living invisible Beings, they would have concluded that waking spectres were also formed and represented by them; since they thought *dreams*, *possession* or *ecstasy*, and *apparitions*, all proceeded from the same cause, and were to be solved the same way.

XLIII. As to what is urged next, that these spirits must be ignorant, absurd, idle, weak, *&c.* otherwise our dreams would not be so trifling and inconsistent; a little consideration will shew us, that they are not such, and may yet represent our dreams as such. Their knowledge surely is surprizingly great, with regard to our nature and constitution. They must understand, not only how spirit acts on matter, since they themselves so act on our organs (*b*); but also how matter acts on spirit, since

(*a*) Διὸ καὶ τοῖς πορέττουσιν ἐνίοτε φαίνεται, ζῶα ἐν τοῖς τοίχοις, ἀπὸ μικρᾶς ὁμοιότητος τῶν γραμμῶν συντιθεμένων. cap. 2. de Insomn.

(*b*) I have all along supposed, that impressions are first made on the sensory when we dream; and that the soul is made percipient of the representations, by means of these impressions; just as it is of external objects, while we are awake, by like impressions. The reasons for this are, *first*, the authority of *those Writers*, whom I have cited on this subject, they all suppose motion and material action the cause of dreaming; and therefore that the organ is primarily affected. *And then* the manner of our reminiscence of dreams: we remember them when awakened, by the help of those impressions; just as we do other things: a man's face, for instance, is the same way remembered in both cases, and leaves the same impressions. *Lastly*, that the soul should be directly affected by these spirits, and the impressions by which we

ſince they ſo affect theſe organs, that they affect the ſoul, in the manner by them deſigned. They muſt have an intuition of the ſecrets of material nature, to us inſcrutable in our preſent ſtate; and know the occult methods which the God of nature hath inſtituted, by which the nerves affect the ſenſory, and it affects the ſoul; ſince they imitate theſe ſo well, that the *natural objects* themſelves could not produce the repreſentation more to the life. If we juſtly admire the ſubtilty of God's work; what may we think of *imitating* or *copying it?* Can this be the work of *chance*, or *unintelligent mechaniſm?* I really think it is a ſpecies of Atheiſm to affirm it. The diviſibility of matter ſoon carries the fine operations of nature out of our view; becauſe we receive information, only through organs of the ſame matter. It is impoſſible therefore ſuch organs ſhould help us to diſcover the nice workmanſhip and contexture of their own parts, or any thing in any other object below particles of a certain ſize in themſelves. No optical improvement will ever effect this. Such is the neceſſary imperfection of material organs: but the manner in which vegetation is performed; the whole theory of the animal œconomy; the ſecret ſprings of motion in our bodies; the imperceptible tremor of each little fibre; what ſhare it hath in producing the effect; and how it is to be otherwiſe ſtruck, that it may produce ſuch a variation from the common method, as beſt ſuits the repreſentation they deſign, (inſomuch that the very *deviations*, and *monſtrous ugly things* they repreſent, ſeem to ſhew moſt skill;) theſe things, I ſay, muſt lie open and pervious to their view; ſince their perception of them doth not depend upon particles of any ſize.

XLIV. Their power and knowledge doth not reach to the exciting of viſion only; they affect the auditory nerves themſelves, or that part which thoſe nerves affect, ſo as to produce the ſame ſenſation in the ſoul, and excite the ſame ideas in it, as if the words of that language which

we remember, reflected back by it on the ſenſory, recedes farther from our philoſophy, and manner of conception, and the method of nature, which God hath inſtituted, which is the very reverſe of this. Yet if any ſhould contend, that this laſt method is the true one; it would rather heighten, than diminiſh the wonderful power and knowledge of theſe Beings, that they ſhould effect the ſame things, by a contrary method to that which the God of nature hath inſtituted, and more ſtrongly prove all that is inferred in this whole ſection. *To grant that the matter of the ſenſory is not firſt and directly acted upon, would be to aſſert, I think, inſtead of denying, an immaterial cauſe of dreams.*

we underſtand, were audibly pronounced, to the hearing of by-ſtanders. This is a ſtrange appearance, and full of conviction! It cannot ſeem to us to be the effect of ordinary power and knowledge, if we conſider the matter attentively. It is in this particular that *reaſon* itſelf is repreſented, and rational ideas *conveyed:* which could not be done but by *a rational Being*. Articulate ſounds ſtand for ideas; and theſe conſiſtently put together are the effect of ratiocination. What cauſe but a rational one could do this? Moreover, it is not becauſe the ſame Beings could not do the ſame thing, in any other, or all other languages; for men of all languages hear *theſe internal diſcourſes*, each in his own, without an interpreter: but becauſe we could not underſtand another. Thus the *knowledge* of languages, which is accounted ſo high an accompliſhment among men, which coſts them ſo much pains, and conſumes ſo much of their time, though poſſeſſed by theſe Beings in perfection, coſts them no ſtudy; nor is to be reckoned any part of their natural endowments; ſince by nature they do not ſtand in need of it (for ſeparate ſpirits do not communicate perceptions by articulate ſounds) but is as ſmall an *acceſſory* to thoſe perfections which are natural to them; as any thing we know can be to their knowledge. What ſhall we ſay, when the ſoul is made to read ſeveral coherent ſentences of a Book in a dream, which is no more than ſome people really, not to ſay frequently, experience (*c*)? The ſoul cer-

(*c*) I ſhall here give the obſervations of a late ingenious Author on this particular, from *Spectator* 487. concerning which I ſpoke ſomething N° 17. above.——*But in dreams it is wonderful to obſerve, with what a ſprightlineſs and alacrity ſhe* [the ſoul] *exerts herſelf. The ſlow in ſpeech make unpremeditated harangues, or converſe readily in languages that they are but little acquainted with. The grave abound in pleaſantries, the dull in repartees and points of wit. There is not a more painful action of the mind than invention; yet in dreams it works with that eaſe and activity, that we are not ſenſible when the faculty is imployed. For inſtance, I believe every one ſome time or other dreams, that he is reading papers, books, or letters; in which caſe the invention prompts ſo readily, that the mind is impoſed upon, and miſtakes its own ſuggeſtions for the compoſitions of another*——Although he is miſtaken, as to the efficient cauſe here; yet it is not to be ſuppoſed, that a perſon of ſuch candor would have written ſo, without experience of the things in which he inſtances. But if the example of N° 7. on which the argument there proceeds, had been ſo full and explicite, it would poſſibly have been ſuſpected, as contrived on purpoſe. Therefore I have all along choſen to argue from caſes a little under the truth. The ſoul could not act in ſleep, and not be conſcious of its own action. And if what it is conſcious of doing itſelf, be above what it could do while awake, as ſpeaking readily in a language it is but little acquainted with, haranguing, &c. which is perhaps not impoſſible; I ſhould think *even this* could not be accounted for, without intereſting ſome *ſuperior cauſe:* ſince certainly its own natural powers cannot be rendered greater, or quicker in ſleep, than otherwiſe.

tainly doth not lay theſe ſentences in print, and then read them, as if it knew nothing of its own induſtry, and action (*d*). All Mr. *Locke*'s reaſoning, *againſt a man's thinking without being conſcious of any thought at all* (in which it is ſtrange if he had any adverſary) may be applied directly to this caſe. To be able to do this, it ought to be *two diſtinct Agents*, as has been ſaid before. And to make *theſe books*, and this *written ſubject*, the effect of *chance*, or of any cauſe working mechanically, is ſomething like *Ennius's Annals being compiled by a fortuitous jumble of letters*. To be reduced to ſay any thing like this, is a ſign that a man hath a bad cauſe in hand; and can allow himſelf to ſay things, without being convinced of them; which is the worſt diſpoſition in the world for

(*d*) There was a particular objection raiſed againſt the argument in N° 6. which becauſe it refers to ſomething ſpoken of in this paragraph, I have reſerved to be conſidered here, as I promiſed in the Note (*i*). It is as follows. "Againſt your argument brought to prove that the ſoul "itſelf cannot be the cauſe of troubleſome repreſentations in dreaming, there ſeems place for an "exception; that by the force of its own imaginative power it can repreſent ſuch things to it "ſelf while awake; as *converſing with others, being upon a precipice, recalling the memory of "imminent danger*, and the like; which it can work up to cauſe troubleſome paſſions, ſuch "as fear and horrour; *Why then may it not be ſuppoſed, by the force of imagination, which exerts "itſelf in ſleep, to do the ſame?* There is a memorable ſtory to this purpoſe, of a *Gentleman* "who in the time of ſnow rode over the Lake of *Geneva*; and being told at his arrival "in the city, of the danger he was in, it made ſuch an impreſſion upon him, that he in-"ſtantly died. It is owned that in your forty fourth paragraph, there are ſome inſtances, "which it ſeems not eaſy to reduce to this ſuppoſition."

But with much ſubmiſſion, *when the ſoul repreſents to itſelf while we are awake, objects of fear and horrour*, it is conſcious that it doth this itſelf; in ſleep it is quite otherwiſe: whence there is no parity to infer that it is equally active in both caſes. *That the ſoul exerts its imaginative power in ſleep, without knowing that it doth it*, is the point in debate, and ought to be proved. The inſtance of the *Gentleman who died upon reflecting on the danger he was in*, ſeems quite different, and muſt be differently accounted for. Allowing this particular example to be literally true (ſince many ſuch ſtories are told) the reaſon of his ſudden death, ſeems to be the ſame, as when one dies with a ſudden exceſſive joy. There are two inſtances of this kind given by *Livy*, after the overthrow at *Thraſimenus*; Two *Mothers* having heard that their *ſons* were killed in the battle, upon ſeeing them return ſafe, dropt down dead with the ſudden exceſs of joy. [—*Fœminarum præcipuè & gaudia inſignia erant, & luctus. Unam in ipſâ portâ, ſoſpite filio, repente oblato, in conſpectu ejus expiraſſe ferunt; alteram, cui mors filii falſò nunciata erat, mœſtam ſedentem domi, ad primum conſpectum redeuntis filii gaudio nimio exanimatam*, lib. 22. cap. 7.] And accordingly ſome caution is to be uſed in acquainting perſons with unexpected news that are extremely good, or extremely bad, leſt the bare relation of them ſhould prove fatal. The reaſon of this I leave for *others* to aſſign; but it ſeems to be a ſudden and inſtantaneous effect, where there is no room for *working up the memory of paſt danger, to cauſe the troubleſome paſſions of fear and horrour*,

for finding out truth. And ſuch conſiderations as theſe made me ſay, N° 10. that the ſame kind of argument, that proves the material world was made by *a living, intelligent cauſe*, proves alſo that our dreams are contrived, and repreſented to us by *ſuch a cauſe*.

XLV. Thus it by no means appears, that theſe Beings are ignorant, or weak; and from this it follows, that we cannot ſay they are abſurd or contradictory; though we cannot find out the reaſon of every incoherent ſcene they preſent to the ſoul in ſleep. They may have the ſpightful deſign to endeavour to inſult and confound human reaſon by ſome of them. They cannot excite in us contradictory, or ſelf-deſtructive ideas; for the wildeſt ideas in ſleep are as conſiſtent and real ideas, becauſe

as the objection ſuppoſes. If a man ſhould read a *letter*, look upon a *precipice, hear an account* of the death of a friend, &c. which ſhould have this fatal effect upon him; the ſoul would be *paſſive* in receiving theſe *impreſſions* which produce it. Perhaps the *quickneſs of the ſurprize* cauſes the ſoul [mechanically, and neceſſarily] to make ſuch an *effort* on, or give ſuch a *ſhock* (if I may ſo expreſs it) to the animal ſpirits, as ſtops at once all the vital motions. Something like this ſeems to happen, though in a leſs degree, on *ſeveral other ſudden ſurprizes*; the body ſtarts, or is ſuddenly ſhaken with this *effort* or *ſhock*, the heart palpitates for ſome time, and the pulſe beats quick; all which it is impoſſible to prevent; the ſoul is paſſive or neceſſary in this caſe, and doth not *work up the paſſions*. And from this laſt particular we may conceive how the conſtitution of the brain itſelf may be diſordered or ſhattered, (ſo to ſpeak) and the exerciſe of reaſon be diſturbed for ever afterwards; as in many caſes we ſee it is, by ſudden *fear, love, grief, diſappointment*, &c. concerning which I have ſpoke N° 41.

In all theſe caſes then the ſoul *is firſt acted upon*, by ſome object which cauſes theſe ſubſequent emotions, that prove fatal or hurtful; but this cannot be applicable to ſhew that the ſoul may preſent to itſelf painful and uneaſy objects in ſleep, without knowing that it doth ſo. It is here likewiſe *firſt acted upon* by ſome object from without; and the objection, when rightly conſidered, ſeems rather to confirm than weaken the argument it is brought againſt. To ſay *the force of imagination exerts itſelf in ſleep* without the conſciouſneſs of the ſoul, is to ſuppoſe *the ſoul unconſcious in its operations*; in which caſe we may *affirm* or *deny* any thing concerning it at pleaſure; or if in ſleep the imaginative power exerts itſelf, without the will and conſciouſneſs of the *imagining Being* [the ſoul] it muſt be *a diſtinct agent*, inſtead of a faculty belonging to an agent. And not to be conſcious of one part of its own conſciouſneſs, at the ſame time *preciſely* that it is conſcious of another part of it, is altogether abſurd, and deſtroys the evidence which ariſes from ſelf-conſciouſneſs, as has been often ſaid. If the inſtances in this paragraph do not agree with the ſuppoſition in the objection, (as is candidly owned) why ſhould any other agree with it, where there is *the ſame diſtinction and diverſity of conſciouſneſs*? If the ſoul doth not form and preſent to itſelf *the ſentences in a book*, why ſhould it form and preſent to itſelf, any other object ſeen in ſleep, in beholding which it is conſcious of being paſſive, and often involuntary? But of all theſe particulars enough hath been ſaid above.

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actually perceived, as the ſobereſt ideas we have while awake. But they may excite in us ideas inconſiſtent with the nature of external material objects; and therefore with the ideas theſe excite in us, deſigning to entangle and perplex our reaſon. However, it will no more follow from this, that the idea of a monſter, with one eye as large as a ſhield, many hands, and ſo tall that a tower might ſtand between his legs; with as many other deviations from the preſent form and ſtature of a man's body, as we pleaſe to add; it will no more follow, I ſay, that ſuch an idea is *contradictory*, becauſe it is not the idea of an ordinary man; than that the idea of a man is contradictory, becauſe it is not the idea of ſuch a monſter. Both ideas are equally real, though the objects of both do not equally exiſt *ab extra*. It would not be a juſt inference, that the idea of a *Negro* is a contradictory idea, becauſe it is not the idea of a *white man*: and the other is no better. This objection from the contradictorineſs of our dreams, ſounds big at firſt, and ſeems very unpromiſing to be accounted for; and yet it hath nothing terrible in it but the bare ſound; only we are too often ſurprized, and grant a thing through inattention, which we ſhould not. Nay farther, we may obſerve that there is no impoſſibility, why ſuch a monſter as is juſt now ſuppoſed, might not exiſt *à parte naturæ*. Whatever is *conceivable*, *may be performed by ſome power*; and nothing is a mark of impoſſibility, but a ſelf-deſtructiveneſs in the idea; ſuch as, that a part may be bigger than the whole. And no Being can prompt us with ſuch an idea, whether aſleep or awake. For it is at firſt impoſſible to the conception. If it were poſſible to conceive ſuch an idea, the object of it might be made to exiſt from without. Thus theſe powers may endeavour to confound human reaſon ſophiſtically, by ſurpriſing us through inattention, to allow that an object ſeen, inconſiſtent with another real object, is abſolutely inconſiſtent; and to render ſuſpected the foundations of evidence and certainty, by engaging us to conſent to *falſe facts*, and *unreal appearances*, in the unguarded hours of ſleep: But we may ſee through the artifice when we are awake; and it is our own fault if we take part with them then (*e*).

XLVI. This

(*e*) It will perhaps be ſaid that all this, concerning the invidious nature of theſe Beings, is only a ſuppoſition. But I anſwer, 1. It is not a contradictory ſuppoſition, and therefore is ſufficient to account for the poſſibility of the point objected to. 2. It is not *my ſuppoſition*, but as old as any thing whereof we have records. *Plutarch* tells us it was τῶν πάνυ παλαιῶν λόγος, that there were φαῦλα δαιμόνια καὶ βάσκανα, προσφθονοῦντα τοῖς ἀγαθοῖς ἀνδράσι, &c. I might bring

XLVI. This imputation on the rational nature of the ſoul, from the inconſiſtency of our dreams, will thus appear ſufficiently taken off, if what hath been ſaid in ſeveral parts above be here remembered. For, firſt, theſe ſcenes are only inconſiſtent, conſidered with reſpect to objects that really exiſt; but not *abſolutely contradictory*, as has been ſhewn juſt before. Secondly, They are not the work of the ſoul itſelf, but involuntarily obtruded upon it; and it is as paſſive, and as much under neceſſity of beholding them, as of beholding the greateſt beauties in the creation. Thirdly, It hath been ſhewn not only convenient, *but even neceſſary*, upon the account of the body, that the region of memory ſhould be covered up in ſleep, ſo that theſe objects, though fantaſtical, muſt appear real. Fourthly, The ſoul may be made to behold the like fantaſtical objects, even while we are awake, and to take them for real. The objections ſeem to make it *a reproach on the ſoul*, that any Being in nature ſhould be ſuperior to it, or able to impoſe upon, or terriſy it. Why ſhould not *Brutus*, or *Dion*, have taken the viſions that were offered to them for ſomething real; ſince as real impreſſions were made on the ſenſory to produce them, as if the objects had exiſted externally? Theſe impreſſions are the *marks* from which we infer the real external exiſtence of *any object* at *any time*. Let a man ſuppoſe that like imaginary ſcenes

many inſtances to ſhew that the word δαίμων, as it is uſed by the beſt writers of antiquity, conſtantly infers this ſuppoſition; and that from hence came the words εὐδαίμων and κακοδαίμων, to expreſs a fortunate or unhappy man. I might give *Heſiod*'s authority;

Τεὶ μὲν δαίμονές εἰσι Διὸς μεγάλου διὰ βουλὰς,
Ἐσθλοὶ, ἐπιχθόνιοι, Φύλακες θνητῶν ἀνθρώπων.

But, laſtly, I would beg leave to obſerve that this is not *a bare ſuppoſition*. For as the exiſtence of ſuch Beings in general, cannot be called a ſuppoſition, when it is proved by *natural phænomena*; ſo the *diverſity of their natures* cannot be called a ſuppoſition, when it is ſhewn by the *diverſity of theſe phænomena*. It is from the nature of the *effect*, that we come to know the nature of the *cauſe* in any caſe. Would it not be abſurd to aſcribe *hurtful effects* to a beneficent and *good cauſe*? and ſtill more abſurd to aſcribe theſe effects to the very *firſt Cauſe*? And yet there is a plain neceſſity of falling into this abſurdity, without allowing a cauſe of a different nature. Men do not conſider that by denying ſecondary and imperfect cauſes, they load the very perfecteſt of Beings with all that is *mean* and *unworthy*. The truth is, they have not been accuſtomed to think any cauſe at all neceſſary; and therefore reckon a man extremely unreaſonable to pretend to inſiſt on the neceſſity of a cauſe to produce an effect; or of a different cauſe to produce an effect of quite an oppoſite nature.

were

were offered to him, and then weigh the matter fairly with himſelf: if he thinks he could not be deceived, he muſt ſuppoſe himſelf to have ſome ſupernatural faculty *of diſtinguiſhing*, which men are not endued with. But allowing he ſhould not be impoſed upon, but know the objects ſeen to be only imaginary; what would he think of ſuch a viſion that was thus offered to him? He muſt certainly conclude that *ſome very extraordinary cauſe* produced it, and perhaps would then be no leſs terrified than if it were otherwiſe. And laſtly, what the ſoul itſelf does or thinks in ſleep, is much the ſame with what it would do or think in like circumſtances, if we were awake. And indeed if a man will conſider the different accidents of this kind that happen to perſons both while aſleep and while awake, (and the latter perhaps without any previous diſorder of the body) he will conceive it very poſſible, that our *waking thoughts* might be all as inconſiſtent, as now our dreams are; and our thoughts in ſleep as conſiſtent as our thoughts are now by day. *So incompetent a principle is the matter of the body, or the right diſpoſition of that matter, to aſcribe the perfection of rational thinking to!* Mr. *Locke*, in a place taken notice of above (*f*.), ſeems to charge this as conſequent upon the aſſertion of ſome of his adverſaries; and yet immediately after, I think, he makes it appear to be his own opinion. He ſays, "This I would willingly be ſatisfied in, Whether the ſoul when it "thinks thus apart, and as it were ſeparate from the body, acts leſs "rationally than when conjointly with it, or no: if its ſeparate thoughts "are leſs rational, then *Theſe Men* muſt ſay that *the ſoul owes the per-* "*fection of rational thinking to the body:* if it does not, 'tis a wonder that "our dreams ſhould be, for the moſt part, ſo frivolous and irrational." Here this abſurdity is firſt made a *conſequence* of what *Theſe Men ſay*; and immediately it is ſurmiſed that the quality of our dreams ſhews this abſurdity to be fact. This is really a ſtrange way of proceeding, to ſhuffle over the odiouſneſs of an inſinuation upon *others*; and in caſe *they* ſhould diſown it, and *that circumſtance* from which he would infer it, (*viz.* that the ſoul thinks without being conſcious of it) to endeavour to prove it, by an appearance, which he has ready at hand. *Theſe Men* deny that the ſoul thinks leſs or more rationally, without being conſcious of it; and therefore any conſequence of ſuch a poſition: but who is it here that appeals to the *frivoloufneſs* and *irrationality* of our Dreams to ſhew, that the ſoul owes the perfection of rational thinking to the body? Mr. *Locke*

(*f*) Sect. 4. N° 21. Note (*q*).

ſhould

ſhould have told us what were his own ſentiments of this affair; and, if it were an abſurdity, ſhewn us how it was to be avoided; but firſt to endeavour to turn it over upon his adverſaries, as ſomething very unjuſtifiable, which therefore ſhewed the abſurdity of their opinion, and then to endeavour to prove it, was altogether ſingular. Here he ſuppoſes that the ſoul itſelf produces all it hears and ſees in ſleep, that it thinks apart and ſeparately at that time, and exerts the utmoſt perfection it is capable of, when deſtitute of the help of the body. How unjuſt and unaccurate a repreſentation of the appearance is this!

This phænomenon of ſleep and dreaming therefore, which hath been made uſe of to exalt the nature of matter, and depreſs the perfection of the ſoul, rightly conſidered ſhews the very contrary. It is upon the account of the body that the activity of the ſoul is reſtrained, that the region of memory is covered up, and by the means of the body that the ſoul is liable to be impoſed upon. The oppoſition of appearances obſervable in this ſtate, (of *fatigue* and *activity*, of *inſenſibility* and *life*, at the ſame time) cannot fail to ſhew us the oppoſite natures of the two conſtituent parts of our compoſition. If *this oppoſition* of appearances had been leſs, or our conſtitution more perfect, perhaps we could not have obſerved theſe different natures with ſo much eaſe and certainty. If all had been a *blank* of thought and conſciouſneſs in ſleep, the *ſoul* would have ſeemed to be of the ſame nature with the body: if there had been *no difference* of thought and conſciouſneſs then and at other times, the *body* would have appeared to be of the ſame nature with the ſoul; nor could the *thinking principle* have been ſo diſtinguiſhable. There are ſo many uſeful and inſtructive appearances belonging to this phænomenon, that I am ſure a curious, fair *Enquirer* would not wiſh it removed out of nature. Whatever the Sceptick may ſay, he ſeeks to *deny*, *diminiſh*, or *pervert* every circumſtance relating to it. How uncomfortable would it be to lie down in a temporary ſtate of non-exiſtence! How delightful is it to think that there is a *world* of ſpirits; that we are ſurrounded with intelligent living Beings, rather than in a *lonely*, *unconſcious Univerſe*, *a wilderneſs of matter!* It is a *pledge* given us of *immortality itſelf*, and that we ſhall not be extinguiſhed all at once, nor cut off from exiſtence. It is true, we are ſometimes inſulted with painful illuſions: but we are at other times gratified by more friendly Powers. It is pleaſant to think that infinite Goodneſs rules over all; this is a rational ſecurity. Were there no other thing, the diſcovery itſelf is worth all the pain we ſuffer. This appearance

pearance is offered to us as a *counter-part* to dead matter. I cannot repeat it too often, *Every thing is beſt as God hath ordered it.* Nothing ſo ordered is void of inſtruction. Who that is rational would *chuſe* to be without theſe intimations of an after-exiſtence? But to return and ſhew other reaſons, why the ſcenes offered may be wild and incoherent.

XLVII. The *indiſpoſition* of the body may hinder the *perfection* and *conſiſtency* of the ſchemes deſigned. For, ſince theſe Beings immediately affect the organ, and by it the ſoul; ſome indiſpoſitions of the organ muſt indiſpoſe it for their deſigns, and marr the conſiſtency of their ſchemes. We ſee an indiſpoſed organ often hinders real external objects from raiſing the ſame ſenſations in the ſoul. Some indiſpoſitions of the head ſo affect the eyes, that the *perſpective* of all objects is much marred; the images are *diſtorted*, or the objects are thrown off to a great diſtance, or they ſeem to *dance* and *wheel round*, though the outward impreſſions are the ſame as at other times. And hence, more probably the confuſion of dreams after eating; than a *not-dreaming*, as *Ariſtotle* ſays. When the *natural* method of perception may be thus vitiated; we may warrantably ſay, the like muſt happen to the impreſſions made by any other cauſe. The rapid motion of the blood in a fever muſt of courſe diſturb ſuch *repreſentations*; as the moving of water ſhatters the images it would otherwiſe repreſent entire (*g*). Sick mens dreams are proverbially wild. *Horace* compares a *poem* to them, where no part is of a piece with the

(*g*) It is worth ones while to conſider the following explication of this particular from *Ariſtotle*, which is no leſs applicable here, than to his hypotheſis; and which therefore I ſhall tranſcribe at large. "Ωσε (ſays he) καθάπερ ἐν ὑγρῷ, ἐὰν σφόδρα κινῇ τις, ὁτὲ μὲν οὐδὲν φάινεται ἐιδωλον· ὁτὲ δὲ φαίνεται μὲν, διεγραμμένον δὲ πάμπαν, ὥσε φαίνεσθαι ἀλλοῖος, ἢ οἷον ἐστιν· ἠρεμήσαντος δὲ, καθαρὰ καὶ φανερά. Ὁυτω καὶ ἐν τῷ καθεύδειν, τὰ φαντάσματα, καὶ αἱ ὑπόλοιποι κινησεις, αἱ συμβαίνουσαι ἀπὸ τῶν αἰσθημάτων, ὁτὲ μὲν ὑπὸ μείζονος ὥσης τῆς ἠρημένης κινήσεως, ἀφανίζονται πάμπαν· ὁτὲ δὲ τεταραγμέναι φαίνονται αἱ ὄψεις, καὶ τεραατώδεις, καὶ οὐκ ἐῤῥωμένα τὰ ἐνύπνια, οἷον τοῖς μελαγχολικοῖς, καὶ πυρέττουσι, καὶ οἰνωμένοις. cap. 2. De inſomn. See here N° 33. above. As this is remarkable, I ſhall give a *tranſlation* of it for the ſake of thoſe who may not underſtand the *original*. "As any liquor (ſays the *Author*) if it be jumbled, ſometimes repreſents no *image* at all, and ſometimes repreſents *the image* diſtorted, and different from what it ſhould be; but if the liquor be undiſturbed, the *image* appears plain and conſpicuous: ſo in ſleep, the φαντάσματα and *impreſſions* ſometimes diſappear altogether, when the foreſaid motions are ſtrong; and ſometimes the *viſions* are miſ-ſhaped and monſtrous, and the *appearances* but ſlender, and weakly impreſſed; as happens to *melancholick* and *feveriſh* perſons, or thoſe who are *drunk*.

reſt.

reſt (*b*). In the morning, when the indiſpoſition that cauſes a confuſion in the brain, is well near worn off, our dreams begin to be more clear and intelligible; as the ſame *Author* obſerves, and our experience confirms (*i*). And theſe conſiderations not only anſwer the *preſent difficulty*, but explain *another*, in ſhewing that all the arguments for our dreams being mechanical, agree well enough with the preſent concluſion. What is mechanical will bear to be explained *this way*; but what is ſpontaneous, living, rational, will never endure to be explained *mechanically*. Again, they may at other times offer to the imagination ſuch wild and frightful figures, as they know muſt naturally terrify the ſoul; which ſeems probable from the *frightful appearances* that are made to accompany the diſeaſe called the *Incubus*, ſpoken of before. Beſides, as there may be a contrariety among themſelves in their inclinations and deſigns, ſo they may induſtriouſly marr each other's repreſentations, and impede the effects of each other's power: for there may be emulation and oppoſition among them, according to the difference of their natures, and extent of their power. Now, according to the obſervation in N° 35. ſince the fundamental truth is certain; it is enough to take off the preſent difficulty, that there is *no open abſurdity* in theſe ſuppoſitions: not to ſay that there is a great deal of probability in them all.

XLVIII. As to what is ſaid of the abſurdity of ſuppoſing ſuch Beings buſied in ſuggeſting imaginary ſcenes to brute animals; it is replied that, ſtrictly ſpeaking, this is *but a ſuppoſition*, and nothing that we can be certain of. If any one was to go about to prove it, he could not poſſibly do more than make it probable. The point is thus. We men have ſcenes of viſion obtruded on the ſoul in ſleep, where there is *life*, *action*, nay and *reaſon too*: the ſoul is unconcerned in the production of theſe: therefore we conclude that a living cauſe produces theſe viſions, and offers them to the perceptivity, a capacity in which we are paſſive and neceſſary. Now ſome beaſts give ſigns, by the motions of their bodies in ſleep, that their perceptivity is

(*b*) ——*Velut ægri ſomnia, vanæ*
Fingentur ſpecies——
De Art. poëtic.

(*i*) ——————*Quirinus*
Poſt mediam noctem viſus; cum ſomnia vera.
Sat. 10. lib. 1.

not vacant then, and that's all (*k*): for ſurely they do not tell us ſo. Whence we ſuppoſe, (with probability indeed) that they have objects alſo preſented to them. And from this again we conclude, ſuppoſing theſe objects are ſuch as could not be produced without a deſigning cauſe, and that they are forced upon their perceptivity, as we know the caſe is with us; they muſt be produced by ſuch a cauſe. Here *the concluſion* is not more certain, than *the matter of fact* that leads to it: and as certain it muſt be. This certainty is not ſo great, as when we make the concluſion with reſpect to ourſelves; for then we infer from *our own conſciouſneſs* and *experience*; but in this caſe from *probability* only, and from *conjecture* in part. And in this there is no apparent abſurdity. As to the reaſons (ſuppoſing all that is deſired) why theſe ſuperior Beings ſhould be buſied in this low occupation; it is not neceſſary to the concluſion, to pretend to know, or aſſign them. Yet it could not be ſhewn to be an abſurdity, or even any thing unphiloſophical, if one ſhould ſay they may be confined by an *over-ruling Power*, to act under ſuch limitations, or on ſuch ſubjects; ſo that ſome of them may be tied down to illude the perceptivity even of brutes. And if ſo, it cannot be a ſmall puniſhment, nor an ordinary degradation, to Beings of ſuch high reach and faculties, to be forced to act in ſuch a groveling ſphere; to accommodate their repreſentations to the capacity of a dog, or ſwine. More might be ſaid; but perhaps it is better to omit theſe things (*l*).

XLIX. The

(*k*) *Lucretius* ſays, lib. 4. ver. 987.

Venantúrque canes, in molli ſæpe quiete,
Jactant crura tamen ſubitò, voceſque repente
Mittunt, & crebras reducunt naribus auras,
Ut veſtigia ſi teneant inventa ferarum.

This is ſo: but when he ſays, birds dream that the hawk purſues them, and that they fly to the ſacred groves, &c. it ſeems rather a poetical embelliſhment.

At variæ fugiunt volucres, pinniſque repente
Sollicitant divûm nocturno tempore lucos
Accipitres ſomno in leni ſi prælia, pugnáſque
Edere ſint perfectantes, viſæque volantes.

Ibid.

(*l*) If this difficulty be conſidered in another light, we may perhaps think it not ſo abſurd, as at firſt it would appear, to allow that ſeparate ſpirits may be thus occupied; when we remember that the *firſt cauſe* ſubmits his infinite power, to *perform* the ſpontaneous motion of *brute animals*, as much as of men; as hath been ſhewn in the ſecond ſection above; and that he

XLIX. The laſt objection I ſhall mention, is an inſinuation, *that our dreams are no more than the thoughts and buſineſs of the day recurring:* or which it may be ſuppoſed the ſoul itſelf ſome way or other reſumes, without the interpoſition of ſuch a cauſe as is here aſſigned. Mr. *Locke* ſays, "The dreams of ſleeping men are, as I take it, *all made up* of the waking man's ideas, though for the moſt part oddly put together *(m)*." *Lucretius* ſays only *ferè* and *plerumque (n)*. It is true when *Dionyſius* dreams that one of his captains killed him, and therefore puts him to death as a conſpirator; this might be of a piece with his day-thoughts, he being a

vouchſafes to guide the *very loweſt and moſt contemptible ſpecies* of them, immediately by his own unerring reaſon. For where ſenſe ceaſes to guide the lower creatures, *inſtinct*, that is, his *immediate direction*, leads them to *all the ends* of Life and Being. However contemptibly we may treat them in our philoſophy, they are *a part* of his creation, and *immediate care*. We may farther obſerve with reſpect to the dreaming of brutes, that *Ariſtotle* allows the appearance, but makes it a reaſon why our dreams are not ſent by God. His words are; Ὅλως δ' ἐπεὶ καὶ τῶν ἄλλων ζώων ὀνειρόττει τινὰ, θειότερμπτα μὲν ἂν εἴη τὰ ἐνύπνια, οὐδὲ γίγνοιτ' ἂν τούτου χάριν· δαιμόνια μέντοι· ἡ γὰρ φύσις δαιμόνια, ἀλλ' οὐ θεία. Where it is, I think, very remarkable, that the nature of this ſurprizing appearance made it otherwiſe probable, that our dreams were ſuggeſted by ſome *intelligent efficient*, had not this particular hindred him from concluding ſo; but as they are accounted for here it hath no weight. The diſtinction φύσις γὰρ δαιμόνια ἀλλ' οὐ θεία is an affected way of ſpeaking; our dreams are truly δαιμόνια, in the proper ſenſe of the word. Nature is θεία, in right philoſophy; but *a fatal or neceſſary conſtitution of nature* (if that be not contradictory) is not ſo much as δαιμόνια. He hath elſewhere another reaſon why our dreams are not ſent by God; becauſe they are only ἀγενεῖς ἄνθρωποι, and οἱ τυχόντες, that have *true* and *ſignificant dreams* (ſee his Book Περὶ τῆς καθ' ὕπνον μαντικῆς) But undoubtedly, if *a poor man* hath a true, ſignificant dream, it muſt have *a ſufficient cauſe*, as much as if *his pupil Alexander* had dreamed it.

(m) Book 2. cap. 1. ſect. 17.

(n) Et quoi quiſque ferè ſtudio devinctus adhæret,——
In ſomnis eadem plerumque videmur obire:
Cauſidici cauſas agere, & componere leges:
Induperatores pugnare, ac prælia obire:
Nautæ contractum cum ventis cernere bellum:
Nos agere hoc autem, &c.

Lib. 4. from ver. 959 to 982.

It ſeems he himſelf wrote over again his Book *De rerum natura* in his ſleep. Farther on, he ſays, ſometimes after the *publick ſhows*, the ſpectators dream over again all the theatrical performances, dances, muſick, &c.

ſuſpicious,

ſuſpicious, bloody tyrant (*o*). But notwithſtanding this, it argues much inattention to be able to ſuppoſe, that the force put upon the ſoul in ſuch a ſcene, was the work of the ſoul itſelf: or that the ſpontaneity, life and deſign in ſuch a viſion, was not the work of a living, deſigning cauſe. Or though we could ſome way or other imagine, that *Caligula* fancied, he was to be aſſumed to a ſhare of the government of the Univerſe; and therefore dreamed before his death, that *Jupiter* kicked him down from his throne (*p*); the ſame exception is to be made to it. But was it ever before in *Aſtyages*'s waking thoughts, or of a piece with them, ἐκ τῶν αἰδοίων τῆς θυγατρὸς φῦναι ἄμπελον, *that out of his Daughter there grew a Vine, which over-ſhaded all Aſia?* Or again, that ſhe diſcharged ſuch a quantity of urine, as made a general inundation in it? Or when *Lucullus* dreamed, that one *Autolycus* deſired to ſpeak with him, a name he had never heard of before, and whoſe hiſtory he learned only next morning from the inhabitants of the place; can it be ſaid that any of his waking thoughts had ſuggeſted this to him? We are placed in circumſtances every night, and ſee things, which for the *newneſs* and *ſtrangeneſs* of them, we are ſurprized how they could enter our fancy. *This obſervation* of Mr. *Locke*'s is ſo far from being exact, that if he had made *juſt the contrary* obſervation, it would have been equally true: which is remarkable enough in a man of his accuracy and judgment. Now, our natural curioſity ſhould rather have prompted us, I think, to ſearch out the cauſe of theſe *new* and *ſtrange* viſions: allowing that the ſoul might ſome way or other, *unknowing to itſelf*, turn over all objects in ſleep, formerly familiar to it; nay and terrify itſelf with ſome of them. Or if our curioſity had not led us to examine the *foreign* ſort of dreams, but rather to enquire into the nature of the other kind, yet how could the *ſoul*, upon Mr. *Locke*'s *own principles*, form to itſelf in ſleep a ſcene of our waking actions and thoughts, and *the man* be ſtill ignorant of it, without being two diſtinct perſons? And ſince they are the thoughts and actions of us rational Beings, could they be introduced to the ſoul again, but by ſome *rational* and *intelligent cauſe?* If a *Lawyer*, to take *one* of *Lucretius*'s *inſtances*, anſwers the objections of the oppoſite party in his ſleep, and if he made theſe objections

(*o*) *Plutarch* ſays of him——Καὶ Μαρσύαν δέ τινα τῶν προηγμένων ὑπ' αὐτοῦ καὶ τεταγμένων ἐφ' ἡγεμονίας ἀνεῖλεν, δόξαντα κατὰ τὸν ὕπνον σφάττειν αὐτόν· ὡς ἀπ' ἐνοίας μισθημερινῆς καὶ διαλογισμοῦ, τῆς ὄψεως ταύτης εἰς τὸν ὕπνον αὐτῷ παραγινομένης. He thought, *he himſelf* could not have had ſuch a dream, unleſs *Marſyas* had really plotted againſt him to take away his life.

(*p*) (Vid. Sueton. in Calig.)

againſt himſelf, ſhould he not be as conſcious that he made them, as that he made the anſwers to them? If objections are made, the efficiency of a rational intelligent cauſe is intereſted, from the nature of the inſtance: and if the perſon himſelf anſwers the objections, the ſoul reaſons ſometimes in ſleep, or *hath ideas under the conduct of the underſtanding.*

L. That theſe ſeparate Agents ſhould ſometimes repreſent to us *familiar* and *known objects*, and immediately after ſomething *new* and *ſtrange*, hath nothing inconſiſtent in it; it is really rather an *argument* for, than an *objection* againſt the concluſion here made. If all our dreams were *of one ſort*, more might be alledged than can be, as things now are. One may farther ſay, if theſe Beings ſuit the viſions they offer us, to our *profeſſion*, *age*, *complexion*, *buſineſs*; they ſuit them alſo to our *paſſions*, *evil habits*, *vices*. Men have been ſometimes in danger of killing a *real friend*, inſtead of an *imaginary enemy*. *Lucretius* tells us maculating dreams accompany youth (*q*). The *covetous*, *revengeful*, *laſcivious*, have thus opportunities thrown in their way, of indulging their vicious inclinations, without reſtraint from *men*, or *human laws*. And it is in this reſpect we are moſt expoſed to the power and cunning of theſe Beings. We ought then to keep our bodies regular, and our minds pure, that we may not afford them a handle. *Democritus* adviſes to pray, that only good and propitious viſions may be formed to us in our ſleep out of thoſe fortuitous films and ſimulacra, which conſtantly riſe from the ſurfaces of material things, and float up and down in the air (*r*). But is it not wonderful what a man can pray to, who believes there is no other thing beſides matter; neither God nor Spirit? It is natural for ſuch a creature as man to pray, when he is in want, fear, diſtreſs; nay, I think it is impoſſible not to pray at ſuch times; but it is ſhocking to pray to *chance*,

(*q*) *Tum quibus ætatis freta primitus inſinuantur,*
Semen ubi ipſa dies membris matura creavit;
Conveniunt ſimulacra foris, è corpore quoque
Nuntia præclari voltûs, &c.

Lib. 4. ver. 1024.

(*r*) Δημόκριτος μὲν γὰρ ἴυχεσθαί φησι διὰ ὅπως εὐλόγχως εἰδώλων τυγχάνωμεν, καὶ τὰ σύμφορα· καὶ τὰ χρηστὰ μᾶλλον ἡμῖν, ἐκ τῶ περιέχοντος, ἢ τὰ φαῦλα καὶ τὰ σκαιὰ συμφέρηται, [certainly to be in continual dread from chance, which neither prayers nor tears can bend, is the worſt kind of Deiſidemony; as *Plutarch* obſerves in the following part of the ſentence] λόγον οὐτ' ἀληθῆ, καὶ πρὸς ἀπιράτους ἐκφέροντα δεισιδαιμονίας εἰς φιλοσοφίαν καταβάλλων. In Æmil.

or to addreſs *fatal neceſſity*. Is it not better philoſophy to pray to that Being who keeps theſe ſpirits in ſubjection, that their malicious deſigns upon us may be fruſtrated?

LI. We may next take notice of the ſolutions of this appearance, given by thoſe who taught the materiality of the ſoul: and after what hath been ſaid juſt now, perhaps no conſideration can better ſhew us *the neceſſity of aſſigning a living intelligent cauſe for it*, than to review the wild and unſupported things theſe men have ſaid to explain it, without the help of ſuch a cauſe. This is the chief deſign and ſubject of *Lucretius*'s 4th Book *De rerum natura*; in the firſt part of which he endeavours, in his own way, to ſhew the manner by which external objects act upon the ſenſes, and produce perception in the mind; reſolving to ſhew how this is applicable alſo to the perception excited in us in our dreams. He ſuppoſes that from the ſurfaces of all material things there are continually flying off thin membranes, pellicles, or ſimilar ſurfaces (*s*). Theſe he calls *ſimulacra*, *membrana*, *cortex*, *effigiæ*. Colours themſelves he makes to be thin coloured pellicles, inceſſantly iſſuing from the coloured body, and tincturing whatever they fall upon with their own die (*t*). Such *tenues*, *conſimiléſque formarum effigiæ* cannot be obſerved ſingly, he ſays; but by their conſtant flux a number of them may, eſpecially from a

(*s*) *Nunc agere incipiam tibi quod vehementer ad has res*
Attinet, eſſe ea quæ rerum ſimulacra vocamus:
Quæ quaſi membranæ ſummo de corpore rerum
Direptæ volitant ultro citróque per auras:
Atque eadem nobis vigilantibus *obvia menteis*
Terrificant; atque in ſomnis, cùm ſæpe figuras
Contuimur miras, ſimulacráque luce carentum.
Ver. 34.

And again,

Dico igitur rerum effigias, tenuéſque figuras
Mittier ab rebus, ſummo de corpore earum;
Quæ quaſi membrana, vel cortex nominitanda 'ſt;
Quòd ſpeciem, ac formam ſimilem gerit ejus imago,
Quojuſcunque cluet de corpore fuſa vagari.
Ver. 46.

One might aſk here by the by, Whence came theſe *ſimulacra luce carentum*, after the bodies were *burnt* or *buried*? The ſurface of the *urn* only or tomb, ſhould have appeared!

(*t*) *Verùm de ſummis ipſum quoque ſæpe colorem, &c.*
Ver. 77.

ſpeculum

ſpeculum (*u*); but that upon wood, ſtone, *&c.* they are ſhivered and broken (*v*). Hitherto this is not much amiſs; at leaſt there is fancy and poetical imagination in it; only he ſeems to be under ſome difficulty when he would prove that there are thin ſurfaces thrown off by bodies, becauſe *graſshoppers* and *ſerpents* caſt their *exuviæ* at certain times of the year; and becauſe ſmoak, vapour, flame, riſe from bodies (*x*). Beſides, he is not aware that, if theſe pellicles fly off in the dark, (for it is then we ſee them in dreams) colours and objects, muſt be ſeen as much, and as well in the dark, as in the light; and if they fly off inceſſantly, they muſt be equally viſible to us while awake as while we ſleep. But then this is not enough, that theſe *ſimilar ſurfaces* are inceſſantly emitted from all bodies; but farther many *ſimulacra rerum* are ſpontaneouſly generated, which do not riſe from any body; theſe are ſtill floating up and down in the air; ſtill changing; and by odd combinations and encounters, make up the ſhapes of *Giants*, *monſters*, and *wild beaſts*; no otherwiſe

(*u*) *Sunt igitur tenues formarum conſimilēſque*
Effigiæ, ſingillatim quas cernere nemo
Cum poſſit: tamen aſſiduo crebróque repulſu
Rejectæ, reddunt ſpeculorum ex æquore viſum; ——
Nec ratione aliâ ſervari poſſe videntur
Tantopere, ut ſimiles reddantur quoique figuræ.
Ver. 103.

(*v*) —— *Sed in aſpera ſaxa,*
Aut in materiem ut ligni pervenit, ibi jam
Scinditur, ut nullum ſimulacrum reddere poſſit.
At cum, ſplendida quæ conſtant, oppoſta fuerunt,
Densáque; ut in primis ſpeculum 'ſt, nihil accidit horum.
Ver. 148.

(*x*) *Principio, quoniam mittunt in rebus apertis*
Corpora res multæ; partim diffuſa ſolutè;
Robora ſeu fumum mittunt; igníſque vaporem;
Et partim contexta magis, condenſáque; ut olim
Cum veteres ponunt tunicas æſtate cicadæ;
Et vituli cùm membranas de corpore ſummo
Naſcentes mittunt; & item cum lubrica ſerpens
Exuit in ſpinis veſtem: ——
Hæc quoniam fiunt; tenuis quoque debet imago
Ab rebus mitti, ſummo de corpore eorum.
Ver. 52.

than

than we ſee ſtrange figures and ſhapes in the clouds (*y*). Farther on he explains this particular, that theſe *ſimulacra* ſometimes ſpontaneouſly exiſt, and ſometimes ariſing in parts, from the bodies of real living creatures, they happen to encounter in the air, and produce monſtrous *compounds* between them; as the *ſurfaces* ariſing from the bodies of a man and a horſe, by ſticking together make up the *ſimulacrum* of a *centaur* (*z*). And thus he hath got a fund of theſe *frightful appearances*, fit for any purpoſe in which he pleaſes to employ them. Then he proceeds to account for viſion, and the appearances of *ſpecula*, ingeniouſly enough from theſe principles (*a*). But his ſubject goes not on ſo ſmoothly with him, when he comes to ſounds. He is aware that in dreams we hear ſounds, voice and ſpeech, as well as ſee images, and moving figures; and ſince voice and ſound have a corporeal nature to impel the ſenſe, which truth he proves, becauſe ſome words hurt the throat while they are pronounced (*b*), he depends upon his *Reader*'s kindneſs, to ſup-

(*y*) *Sed ne ſorte putes ea demùm ſola vagare*
Quæcunque ab rebus rerum ſimulacra recedunt:
Sunt etiam quæ ſponte ſuâ gignuntur, & ipſa
Conſtituuntur in hoc cœlo, qui dicitur aër;
Quæ multis formata modis ſublimè feruntur;
Nec ſpeciem mutare ſuam liquentia ceſſant;
Et quojuſque modi formarum vertere in ora.
Ut nubeis facilè interdum concreſcere in alto
Cernimus——— Ver. 130.

(*z*) *Omne genus quoniam paſſim ſimulacra feruntur*
Partim ſponte ſuâ quæ fiunt aëre in ipſo;
Partim quæ variis ab rebus cunque recedunt:
Et quæ conſiſtunt ex horum facta figuris.
Nam certè ex vivo Centauri non ſit imago,
Nulla fuit quoniam talis natura animalis.
Verùm ubi equi atque hominis convenit imago
Hæreſcit facile extemplo——— Ver. 740.

(*a*) *Nunc age cur ultra ſpeculum videatur imago, &c.* Ver. 270.

(*b*) *Scilicet expletis quoque janua raditur oris*
Rauca viis; & iter lædit, qua vox it in auras. Ver. 535.

poſe

poſe that ſounds may have their *cortices* and *membranæ* alſo; leaving him to fancy as well as he can (having thus ſet his imagination at work) how the *images* and *ſpectres* of words and ſentences, may hover up and down in the air, till he fall aſleep, and then diſcharge themſelves upon him in dreams.

LII. Theſe foundations being laid, he comes to the ſolution of dreaming, which is now an eaſy affair: for theſe *ſpectres* and *ſimulacra* of corporeal things, conſtantly emitted from them, and floating up and down in the air, come and aſſault the ſoul in ſleep (*c*). And as for *chimera's*, and other *monſtrous repreſentations*, theſe he had prepared beforehand, (*ver.* 130. *& ſeq.*) All this is well enough, if he had but taken care to tell us, how theſe *ſimulacra*, ſuch *ſlender pellicles*, get in whole and entire to the breaſt, or heart, which he makes the ſeat of the ſoul, as hath before been obſerved; for he allows they are ſhattered, when they fall upon any rugged, uneven ſurface: and in giving the difference between ſounds and images, he ſays, though a ſound may get whole and entire through any chink, or crany, yet an *image* or *ſimulacrum* cannot; but muſt be ruined and broken, if it hath not room to enter all at once (*d*). But leaving many inconſiſtencies untouched; let us take notice of the ſhifts *Lucretius* is put to, in accounting firſt, how theſe *cortices* of bodies ſhould have *motion* and *life*; and then, how they ſhould *act with deſign*, *reaſon*, and *intelligence*. Here he cannot ſo much as allege his efficient cauſe, *chance*; for all this muſt be done in an inſtant: there is not an eternity of time, wherein theſe pellicles may dance about, and

Omne genus motûs, & cœtûs experiundo;
Tandem deveniant in taleis diſpoſituras.

Lib. 1. ver. 1025.

(*c*) *Nunc age; quæ moveant animum res, accipe & unde*
Quæ veniunt, veniant in mentem, percipe paucis.
Principio hoc dico, rerum ſimulacra vagari
Multa modis multis———

Ver. 726.

(*d*) *Nimirum quia vox per flexa foramina rerum*
Incolumis tranſire poteſt; ſimulacra renutant:
Perſcinduntur enim, niſi recta foramina tranant.

Ver. 603.

till

till at length they caſually form the viſion to be preſented to the ſoul. As to the firſt; how theſe fluctuating *films* of bodies ſhould have *life* and *action*, ſo as to repreſent a regular dance to the ſoul in ſleep——

Brachiáque in numerum jactare, & cætera membra:
Nam fit, ut in ſomnis facere hoc videatur imago.

Ver. 773.

He ſays this is not wonderful; for it is not the ſame image that performs this: but that there are as many different images, as we fancy there are different poſtures of the ſame image: that when one of theſe *exuviæ* of bodies hath appeared, and repreſented one poſture, it is deſtroyed, and another different one comes, and repreſents the ſecond poſture, which we ſtill fancy to be the firſt; and juſt ſo, a third *caſe*, or *thin ſheet of matter* appears in a third poſture, *&c.*

Non mirum eſt ſimulacra moveri; ——
Quippe ubi prima perit, alióque eſt altera nata
Endo ſtatu; prior hæc geſtum mutáſſe videtur.

Ibid.

Grave men perhaps will be angry with me for tranſcribing theſe abſurdities: and it would not, I own, be excuſable, if it were not to ſhew what kind of philoſophy hath been embraced, rather than the exiſtence of ſeparate ſpirits ſhould be acknowledged,

——*Ne forte animas Acherunte reamur*
Effugere; aut umbras inter vivos volitare:
Neve aliquid noſtri poſt mortem poſſe relinqui, &c.

Ver. 41.

For, as appears from what was lately ſaid, all this is the doctrine of *Democritus* (*e*). And certainly, no words could ſo well demonſtrate to us the folly

(*e*) *Ariſtotle* ſays, cap. 3. Περὶ τῆς καθ' ὕπνον μαντικῆς. Τοῦον δ' ἂν εἴη μᾶλλον, ἢ ὥσπερ λέγει Δημόκριτος, εἴδωλα καὶ ἀπορροὰς αἰτιώμενος. What *Ariſtotle* ſubſtitutes inſtead of this, is his own ſolution; where, if we conſult the place, we ſhall ſee no leſs egregious trifling. "Becauſe the "air is not ruffled with wind in the night-time, the κινήσεις have more effect, and the dreams "are fitter to be divined from!"

of attempting to account for *this various, wonderful, living appearance* (ſo to ſpeak) as remarking upon abſurd fictions. And, to ſave the trouble of repeating it often, let me obſerve, that the *Authors* of all the other *hypotheſes* would be as ridiculous, if they were as minute. They ſay ſome general thing or other; but dare not offer to apply their ſolutions to any one inſtance. As to the ſecond difficulty, Why theſe *empty ſheets of matter* ſhould act with *reaſon* and *intelligence*, inſtead of pretending to ſolve it, he turns another way, to ask queſtions concerning it, ſuch as, Whether we may not ſuppoſe that they wait the nod of the will?

Anne voluntatem noſtram ſimulacra tuentur?
Et ſimul ac volumus nobis occurrit imago?
Ver. 782.

Or, when they repreſent ſome theatrical performance, Whether we are not to think, that theſe *cortices* are *learned*, and *full of art?*

Scilicet arte madent ſimulacra, & docta vagantur,
Nocturno facere ut poſſint in tempore ludos?

Let any one in this place reflect on the neceſſity that forced *Lucretius* to make theſe extraordinary ſuppoſitions. And then let me ask a *Sceptick*, who has ever ſo little ingenuity left, if it be not a ſtrange attempt to account for life and reaſon mechanically. To mention only one thing more; he crowns all, in his accounting for ſpontaneous motion, and volition, by theſe ſurfaces. He ſays, the *ſurface of walking* (I know no better *Engliſh* word for it) beats upon the ſoul, excites the will of walking in it; and ſo protrudes the whole corporeal bulk.

Nunc qui fiat, uti paſſus proferre queamus,
Cum volumus, ———
Et quæ res tantum hoc oneris protrudere noſtri
Corporis inſuêrit, dicam: tu percipe dicta.
Dico animo noſtro primùm ſimulacra meandi
Accedere, atque animum pulſare, ut diximus ante.
Inde voluntas fit.
Ver. 875.

LIII. Others,

LIII. Others, to avoid theſe abſurdities, have ſought the ſolution of this appearance, from the *mechaniſm* of the body only. Mr. *Hobbes* endeavours to account for it thus, chap. 2. of his *Leviathan*, *concerning the imagination*. "When a body is once in motion, it moveth (unleſs ſome-"thing elſe hinder it) eternally; and whatſoever hindereth it, cannot in "an inſtant, but in time, and by degrees, quite extinguiſh it: and as we "ſee in the water, though the wind ceaſe, the waves give not over rolling "for a long time after; ſo alſo it happeneth in that motion, which is made "in the internal parts of a man, then when he ſees, dreams, *&c.* For "after the object is removed, or the eyes ſhut, we ſtill retain an image "of the thing ſeen, though more obſcure than when we ſee it."——— So again in chap. 45. he ſays, "And the motion made by this preſſure, "continuing after the object which cauſed it is removed, is what we call "*imagination*, and *memory*, and (in ſleep, and ſometimes in *great diſtem-*"*pers of the organs*, by ſickneſs, or violence) a *dream*." Thus he makes *dreaming* to be the *preſſure made in the organ*, continuing, or repeated in ſleep. But this is ſo ſhamefully poor and unſatisfying a cauſe of this appearance, that it accounts for nothing; and it is almoſt loſs of time to ſtay to ſhew the lameneſs of it. Every thing ſaid, is as eaſily denied as affirmed, and with a hundred times more probability. How comes this motion to be *begun again*, after it hath been *ſtopped*, by ſo many intervening, various, contrary motions? Though a moving body without external impediment, will always move on; this does not prove that it will move on through all the impediments it can meet with: or that it will take up a motion once extinguiſhed, and that after ſo long an interruption. There is no circumſtance common to a body moving in *vacuo*, (of which this axiom is true) and the internal parts of a man's body. A pendulum moving freely, will not move half a night; why ſhould the internal parts of a man's body, crowded, obſtructed, move the whole night? nay, why ſhould they move moſt freely in the morning? It had been altogether as ſatisfactory to have ſaid, that a *tennis ball*, when a motion is *impreſſed* upon it by a *racket*, and then *deſtroyed* by the contrary force of another racket, will, when that contrary force is ſpent, begin and continue the firſt impreſſed motion: or that a *harpſicord*, when a tune is firſt played upon it, and then a dozen of other tunes, will, when the motion of them all is ſtopped, begin the firſt tune of itſelf again. Beſides, according to this account, either the *laſt impreſſed motion* ſhould be firſt re-

newed, after we fall aſleep, and we ſhould dream over the day-objects retrograde; or *all the waking motions ſhould be renewed in order*, and we ſhould do every thing twice over; or the *ſtrongeſt only* ſhould be renewed. But this is ridiculous, and contrary to fact. We ſee things in ſleep that have not been in our waking thoughts for many days, or years before, perhaps never. And what can be ſaid of theſe from this ſolution? Or perhaps we ſee ſomething in a dream, that is familiar to us; and immediately after a thing, that we never thought on before: why are theſe joined together? or how can a motion be continued, that is begun only for the firſt time? This is ſo unperforming an hypotheſis, that it anſwers for nothing. He brings in cold, as has been obſerved above, to breed dreams of fear; and heat, thoſe of anger. Why doth he not apply this hypotheſis of his, to account for *Brutus*'s viſion? Or if that was too hard, for *Calpurnia*'s the night before *Cæſar* was killed? Or at leaſt for ſome common inſtance? Every *Hypotheſis-Maker* makes a trial of his hypotheſis, to ſhew how well it does. Laſtly, If we hear ſome kind of ſounds long, they will continue in the ears it is true, for ſome time after, while we are awake; but are broken off immediately in ſleep; which is directly againſt Mr. *Hobbes*'s obſervation.

LIV. It is to be remarked, that this Author hath given ſome dreams *a higher original*. In the fortieth chapter of this Book he writes thus. "The father of the faithful, and firſt in the kingdom of God by covenant "was *Abraham*. For with him was the covenant firſt made; wherein he "obliged himſelf, and his ſeed after him, to acknowledge and obey the "commands of God; not only ſuch as he could take notice of, (as "moral laws) by the light of nature; but alſo ſuch as God ſhould *in* "*a ſpecial manner* deliver to him by *dreams* and *viſions*."——And, having in a few words inſiſted, that there was no need of a particular contract, to add force to the obligation of moral laws, he continues——"And therefore the covenant which *Abraham* made with God, was to "take for the commandment of God, that which in the name of God, "was commanded him *in a dream* or *viſion*; and to deliver it to his "family, and cauſe them to obſerve the ſame." All that can be ſaid to this, I think, is, that he who wrote thus, ſhould not have advanced ſuch an hypotheſis, for ſolving the appearance of dreaming in a mechanical way. Were theſe dreams *the motions only of external objects impreſſed on the ſenſes, and continued after the objects themſelves were gone?* A *monitory dream*

dream or *vision*, as to the natural manner of its production, is so like another dream which is not monitory, that it is strange any one should assign such opposite causes, for effects every way alike, except in relation to certain events which are to follow. Nor is it less surprizing, that, after what he has written in many places, he should still conclude with *so much assurance*, and so *little argument*, that the soul of man, all spirits, and God infinite in all perfections, are but material things (as hath been observed above.) This is but a poor remedy for the *jargon of the schools* which he complains of.

LV. This last solution of dreaming is taken from *Aristotle*'s; and so little different from it, that the same considerations shew them both to be quite foreign to the purpose. *Aristotle* says, that the objects of sense produce sensation in every one of the organs; and that this sensation, or perception [πάθος] remains in the organs, not only while the objects act, but after they are gone (*f*); illustrating his account, with the examples of those, who by long looking on the sun, see nothing when they turn away their eyes, διὰ τὴν ἔτι ὑποῦσαν κίνησιν ἐν τοῖς ὄμμασιν, ὑπὸ τοῦ φωτός, and of those, who by looking long on any colour, see all objects of that colour; and of those who think every thing moves, after having long looked on running water (*g*). It were to be wished, by this solution of his, that he had tried to explain any common instance of dreaming, such as that *of the man with the sword, pursuing, and threatening*

(*f*) Τὶ δέ ἐστι τὸ ἐνύπνιον, καὶ πῶς γίνεται, ἐκ τῶν περὶ τὸν ὕπνον συμβαινόντων μάλιστ' ἂν γνωρίσωμεν· τὰ γὰρ αἰσθητὰ καθ' ἕκαστον αἰσθητήριον, ἡμῖν ἐμποιοῦσιν αἴσθησιν· καὶ τὸ γινόμενο, ὑπ' αὐτῶν πάθος, οὗ μόνον ἐνυπάρχει ἐν τοῖς αἰσθητηρίοις, ἐνεργουσῶν τῶν αἰσθήσεων, ἀλλὰ καὶ ἀπελθούσων. κ. λ. cap. 2.

(*g*) After which he observes that violent sounds render men thick of hearing; and that strong scents, acting long on the organ, blunt the quickness of that sense afterward; γίνονται δὲ ἀπὸ τῶν μεγάλων ψόφων δύσκωφοι· γίνονται καὶ ἀπὸ τῶν ἰσχυρῶν ὀσμῶν δύσοδμοι· καὶ ἐπὶ τῶν ὁμοίων. But all this is only going about with little distant similitudes, and begging men not to be over difficult to be persuaded: a common shift when men would account for some great thing, from unsatisfying principles. *Lucretius* is remarkable for this art through his whole book; a small resemblance, which rather doth not contradict, than confirm, serves for a proof with him. Yet, I know not how, he came to venture to be so particular in this case: charmed, I suppose, with the poetical imagination; and therefore he appears so ridiculously absurd: but, as has been said, if *other Authors* had offered to apply their solutions minutely to particular cases, we should have seen abundance of as silly and ridiculous suppositions. Let any one make the trial upon his examples.

us; or that he had taken notice of that *diverſity of conſciouſneſs*, that is in the rational part of the φαντάσμα; or of that *ſpontaneity*, which is in the animate part of it (ſee N° 25.) ſo different from what the ſoul itſelf thinks and does, as he himſelf obſerves; or that he had explained how ſuch *force* and *violence* is uſed upon the ſoul, by *this remainder* of *external impreſſions*, which ſhould ſeem familiar to it. Surely we may ſay that theſe motions, excited in the viſory nerves, by the *ſun*, or *colours*, or the *running water*, are now quite ſtopped, when we ſee all other objects again, as we ſaw them before; and therefore that it muſt be ſo *à fortiori*, with reſpect to other objects, which do not make ſuch ſtrong impreſſions. Beſides, ſuch a *confuſion* as remains even during the time they laſt, could never be the cauſe of that *diſtinct viſion* we have in ſleep; nor therefore any *remainder of motion* the cauſe of *diſtinct perception* then. Nor could we deduce the *infinite variety* of dreams, from this *uniform*, *mechanical cauſe*. Nothing new could then ever be offered to the ſoul in ſleep; all being the remains of familiar waking impreſſions. Could ordinary common objects, occaſion the appearance of objects we never ſaw before? With the leave of ſo great a man, would it be at all more abſurd to ſay, that the *ſhadow* of *Coriſcus*'s body (*b*), which only moves as his body moves, may become a *living intelligent agent*; than to ſay, that the impreſſions made by *Coriſcus*'s actions on the ſenſory while awake, may perform other *ſpontaneous*, *rational actions*, of which *Coriſcus* himſelf never gave a copy? *Lucretius*'s *ſimulacra* are more entertaining; nor really are they leſs ſatisfactory than this dry notion. When a *ſchool-boy* aſks his *Maſter* ſomething, that happens to be too hard for them both; the *Maſter* pretends to give him a reaſon, and the *boy* is put off, thinking he is not yet advanced enough to underſtand ſuch deep things: but the *Maſter* hath not that ſatisfaction in his own mind, which ariſes from knowing the caſe, and his having made another underſtand it. So, I think, it is with *Democritus*, *Epicurus*, *Ariſtotle*, and their ſeveral followers: whatever theſe men ſaid to amuſe others, they had not the pleaſure to believe themſelves.

LVI. Before we leave this ſubject of our dreams, there is one circumſtance more to be obſerved in them, wonderful enough; which might be of uſe to us, if we could enter more into the nature of it. I ſhall

(*b*) De inſomniis, cap. 2.

only endeavour to expreſs the appearance itſelf, and take notice of a truth, which ſeems naturally to follow from it: perhaps ſome other hand may not diſdain to purſue it. It is this: In our ſleep *perſons* and *objects* are frequently preſented to us, with the *newneſs* of which we are no way ſurpriſed, becauſe we ſeem to know them. They are repreſented as known and familiar objects, and we allow them to be ſuch, being acquainted with them at firſt ſight; though we know not how, nor where, ſuch familiarity was contracted: for on awaking, we wonder how we thought we knew them, or entered ſo eaſily into their deſigns and buſineſs. We frequently think we come into a *company*, where we ſeem to know what we came for, and what is every one's part of the buſineſs in hand: or we are all of a ſudden engaged in circumſtances, and a courſe of action, which appears to us to be the conſequence of former action, which we readily own we have been concerned in. A man imagines he is in danger or trouble, becauſe he did ſuch things formerly, of which he ſeems to know himſelf guilty: he is ſtung with grief and remorſe for crimes he allows he hath perpetrated years before; or he is praiſed for great and virtuous actions, of the merit of which he ſeems ſecretly conſcious. In a word, there is this *notable difference* between what we ſee while awake, and what we ſee in ſleep; that if we ſee any thing new while awake, we know that it is new to us, and find that difficulty and uneaſineſs in us, which attends ignorance and unacquaintance: but oftentimes it happens, though we ſee a thing for the firſt time only in ſleep, yet we do not think it *new* to us, but familiar, and *not new*. This, I believe, will be found to be every one's experience, and an ordinary qualification of our ſleeping thoughts. Any one will be ſurpriſed when he obſerves that *this knowledge*, which the ſoul is prompted with in dreams, of the perſons and objects then offered to it, vaniſhes as ſoon as the ſenſes are opened, and external objects begin to act through them; as if the recovering our former experience of the things in real life, darkened and chaſed away the *other*; or as if theſe two were inconſiſtent together.

LVII. I ſhall venture to give an inſtance or two of this kind of dreams, to help the better to explain what I mean, the exactneſs in the relation of which may be depended on: or, it is the ſame thing if we ſuppoſe them imaginary examples, made to be reaſoned from; provided there be nothing improbable or prodigious in them: if it were poſſible for any inſtance in this ſubject

ſubject could be ſuch (*i*). A perſon dreams, for inſtance, that he hath lived for a conſiderable time in a ſtate of marriage with a certain woman, who had been dead many years before; and though he knows not the beginning of this affair, or how it came about, yet he allows it to be ſo, remembers *ſome circumſtances* of their paſt life together, and ſeems to know the ſituation of their circumſtances at preſent, as if he had been led into it *from the experience of ſome years.* Again, another hath this ſcene preſented to him in his ſleep. He fancies *a perſon reads to him certain ſentences out of a book*, and that neither the *perſon reading*, nor the *ſubject read*, are unknown to him, but that he is familiarly acquainted with both; inſomuch that he knows beforehand, what the other is to read to him, and the deſign of the writer: and hath his remarks ready to offer upon it, as if he had peruſed this *viſionary Author* long ſince. And upon awaking, he remembers ſome of the words read to him, and ſomething of what he had to obſerve concerning it: but the ſcene gradually diſappears; and the more he ſeeks to recover his own ſleeping arguments, and the other's reaſons, by the help of his *waking memory*, the more they are darkned by that very endeavour. One under this diſappointment will be vexed that he did not dream on, or that any thing ſhould diſturb him, while he is endeavouring to catch the ſhy remains of his viſion, or, if poſſible, to replace himſelf in the ſame ſtate of conſciouſneſs. Here is a whole ſcene (or ſmall conſiſtent ſyſtem) of inſtantaneous knowledge, which might be concerning any one aſſignable ſubject, as well as another, (for the prompting us with a ready familiarity with any knowable ſubject, without our own pains in acquiring it by the ordinary methods, is the only difficulty in the appearance) and which might have been continued, I think, to any length, by the ſame *Power* that began it (*k*).

LVIII. This

(*i*) *Lucian* ſays,——Εἰ δὲ πυφάδοξα ἔπαθε, μὴ ἀπιστήσητε· θαυμαστοποιὸς γὰρ ὄνειρος. *Cicero* ſays, *Nihil eſt magnum ſomnianti*, as above.

(*k*). I beg leave here to endeavour to take off a particular objection againſt the preceding part of this Eſſay, but urged chiefly againſt the ſubject of theſe two laſt paragraphs. It is ſaid, "The "ſolution I have given, and eſpecially what I mention in this place, makes dreams mere "*enchantment* and *Roſicrucian-work*, which it is abſurd to admit into philoſophy and among "natural appearances; and that upon this account, we ſee Men have always choſen to explain "the phænomenon another way." But with much ſubmiſſion, I deſire thoſe who make this objection, to review the *appearance itſelf* once again; and then let them ſay, Whether I have miſrepreſented it: whether it is not really what may be called *enchantment* and *Roſicrucian-work* in itſelf, and abſtracting from any ſolution; and whether this *enchantment* be not a *true* and

LVIII. This is the appearance. And it ſeems inexplicable to our preſent philoſophy. The objects of ſenſe, to ſpeak only of theſe, leave an impreſſion upon the organ by acting: this the ſoul applies to, and conſults, when it would conſider the objects themſelves, now abſent. When they *act again*, if the firſt impreſſion be not quite worn out, they retouch and ſtrengthen it; and the ſoul becomes percipient, not of a new impreſſion, but of an *impreſſion renewed:* for the laſt impreſſion is perceived congruous to, or coincident with the firſt, if I may ſo ſpeak. Hence the

and *real phænomenon*, actually exhibited in nature. Let it be conſidered, that this ſort of objection muſt of neceſſity be levelled, not againſt any ſolution, but the appearance itſelf, as it ſtands in nature; ſince it is certain that, if there be any thing which can be called *enchantment* or *Roſicrucian-work*, if that be not contradictory and abſolutely impoſſible, this *appearance* is ſuch in the literal meaning of the word. And if it be a common and conſtant appearance in nature, how can it be abſurd to admit it into philoſophy, or allow it a place among *natural phænomena?* Hence *my ſolution* cannot make it *enchantment*, it being ſuch in itſelf antecedent to *any ſolution* that can be given. If it be meant that, although it be ſuch as is here repreſented, we ſhould, nevertheleſs, endeavour to account for it in ſome other way, or elſe let it quite alone. I anſwer; As to the accounting for it any other way, I am not able; let any one try it who pleaſes. With what ſucceſs it hath been accounted for in all the mechanical ways hitherto attempted, I leave the world to judge. And as to letting it quite alone, I did not certainly go out of my road to find it, but had it placed directly in my way, by *thoſe Authors* who had treated of it before. It is objected as a *reproach* on the rational nature of the ſoul, inſiſted on by *Materialiſts*, and pompouſly accounted for as *an effect* of matter and mechaniſm. All this being inconſiſtent with the inertia of matter, and the account of mechaniſm which I have given, forced me to engage in this difficult, abſtruſe ſubject. And if what I have advanced concerning it be juſt, there can be no harm done; only men will be obliged to alter their opinions a little, and that to the right ſide; but if it ſhould be wrong, I am not quite ſo fooliſh, as to imagine it can paſs. Nor is it to be ſuppoſed that a ſubject of this kind will be *let quite alone:* whoever thinks he can make any advantage of it, will bring it into his ſide of the controverſy. It was this way probably that *Democritus* brought it firſt into the controverſy, obſerving *Homer*'s authority ſo prevalent on the other ſide; though *Homer* ſpoke of it as nature pointed out, without being of any party. But ever ſince, *theſe Men* have always brought it into their ſide of the controverſy.

But after all, do not *thoſe* who are leaſt willing to admit of *enchantment* and *Roſicrucian-work* among the *appearances* of *nature*, find themſelves ſo *enchanted, deluded, impoſed upon* every night? Have they not experience of the *force* and *efficacy* of this *art?* If they have not experience of it, they are proof, it ſeems, againſt the cauſe of this phænomenon, whatever it be, whether *matter* and *motion*, or *immaterial* Agents; and if they are not proof againſt *that cauſe*, to what purpoſe is it to diſpute about the *name*, while they own the *thing* itſelf? Beſides, has not every *Author* who treats on this ſubject, aſſigned more wonderful inſtances than I have ventured to give? And is not this, firſt to *own* the power of the cauſe exerted in the effect, and then to *diſown* it

the ſoul perceives that object with memory: for memory (as we are paſſive in it) is only a thing's being brought into the perception, with a *ſecondary* or *concomitant* perception, which diſtinguiſhes it from a new perception, and makes it appear only *a perception renewed:* or that it was there once at leaſt before. Accordingly, the oftener a thing hath been in the perception, ſtill accompanied with this *ſecondary perception*, the ſtronger the memory of it is; for the firſt impreſſion is ſtill made more lively and laſting: and on the other hand, when the firſt impreſſion is almoſt worn out, this ſecondary perception is dark, and memory weak; and when an object

again, by giving it a falſe name? It muſt be prepoſterous to endeavour to *ſink* the cauſe, and *exalt* the effect at the ſame time. Is it not inconſiſtent in *Cicero*, when he would treat of every thing that is noble and ſublime; when he would explain the conſtitution of the *Univerſe*, the order and motion of the *heavenly bodies*; when he would ſpeak of the nature of the *ſoul*, and of the infinite *Fountain of all Being*; in a word, when he would expreſs the nobleſt ſentiments that can enter into the mind of man; to deliver all under the form of a Dream, and yet elſewhere to ſay——*Omnium ſomniorum eadem eſt ratio, &c?* Either ſome dreams have a higher original, or he *degrades* his *ſubject*, by dreſſing it up as a dream. On his ſuppoſition, it muſt have been as *probable*, and even *decent*, to have ſaid, all this was the *rovings of a man in a fever*, as the *Dream of a Scipio*. This is confeſſing one way, and denying another.

As to what I obſerve concerning dreams in theſe two laſt paragraphs; *viz. That in them we are often prompted with an inſtantaneous knowledge of things we never thought of while awake, and a ready familiarity with objects altogether new*; I muſt refer to men's own experience for the truth of it. I cannot indeed bring an authority from any *Writer* on this ſubject whom I have ſeen, to vouch the juſtneſs of this obſervation; but if it may be determined by *experience*, authority will not appear abſolutely neceſſary. We ſeem to know a *perſon* in a Dream, and the *character* he bears, at firſt ſight; or the *circumſtances* he is in, and his *inclinations* to us; though on awaking, we can find nothing in our former knowledge that can agree to him. We *rarely admire* any thing then for its *novelty*, and ſeem never to be uneaſy for want of information, let the circumſtances be ever ſo new; though we ſhould certainly be uneaſy in a *waking ſtate*, till we had informed ourſelves about every thing we ſaw. In ſhort, we enter ſo readily and eaſily into every thing heard and ſeen while we ſleep, that nothing ſurprizes us, merely becauſe it is ſtrange and new. And this itſelf ſeems ſurprizing and wonderful, if we compare it with the way how the mind is *differently* affected, while we are awake. It is true, they who ridicule or deſpiſe this whole appearance, and every circumſtance obſervable in it, as below a philoſophical conſideration, may perhaps be diſſatisfied; but that is not to be prevented. It is notwithſtanding, a *real* phænomenon, and this a *real* circumſtance of it; and ſince ſome of the moſt celebrated Authors, as *Ariſtotle*, *Lucretius*, *&c.* have treated it in a philoſophical way, the *ridicule* or *contempt* ſhould fall upon them firſt; unleſs it be *meritorious* to exalt the powers of matter and mechaniſm, as they have done, and *ridiculous* to diſſent from them.

But let me ſeriouſly aſk, If all that I contend for were true, would men be in a worſe condition, than if *matter*, and *unguided motion* performed all that is done in the Univerſe? This

i;

object hath been long out of the perceptivity, ſo that the impreſſion is quite cancelled, it is as new to us, as if it had never been there before; becauſe it is entirely a new impreſſion, not an impreſſion renewed. Hence it is that many caſualties which affect the ſenſory, weaken the impreſſions made on it, and conſequently affect the memory equally. (See N° 12. of the laſt Sect. concerning the ſoft and yielding ſubſtance of the ſenſory.) Drunkenneſs, old age, a ſtroak or wound on the head, and many diſeaſes do this: and, as has been obſerved above, this is the conſtant and firſt effect of ſleep. Memory, as we are active in it, is the power

is a *plain queſtion*, and the *anſwer* to it will decide a great deal in a few words. *If the motion of matter be guided*, all that I contend for (or elſe *more* than I contend for in the preſent caſe) is allowed. There is then no ſhifting, nor declining of conſequences. *If the motion of matter be not guided*; we are at the *mercy* of the moſt *inexorable* of all things, *brute-matter toſſed about by chance*. And is it not ſtrange for men to pretend to foreſee *ſuch dreadful conſequences* in the one caſe, and to be in ſuch *ſecurity* in the other? *Direction* and *ſuperintendence* terrifies them, and the *abſence of theſe* makes them eaſy! But to proceed, I have ſhewn that the motion of matter *is guided* in every the *moſt contemptible appearance* in the Univerſe; after which, let us ſuppoſe that the preſent appearance is merely mechanical, *as mechanical* as any man would have it to be: And this only engages a *higher Power* in it, according to the argument in N° 29. ſince the *firſt Cauſe* is the *ſole Mover* in all mechanical motions. And thus, out of an unwillingneſs to allow a juſt and adequate cauſe of this phænomenon, we neceſſarily intereſt the very *firſt* and *higheſt Being* in the production of it; and, as I ſaid above, N° 45. Note *(e)*, load the *Deity* with all that is *mean* and *unworthy*, leſt we ſhould *degrade inferior Agents*. It happens here, as before, with reſpect to the *inertia* of matter; (ſee the Note *(p)* N° 22. Sect. 1.) As long as matter was ſuppoſed a *reſiſting ſubſtance*, an *immaterial Mover* was neceſſary; and when we ſuppoſed it *quite unreſiſting*, the difficulty we would have avoided became greater. So in this point, if dreams are allowed to be *inmechanical*, all that is contended for follows; and if they are denied to be *immechanical*, more than is contended for becomes unavoidable. A greater evidence than this cannot well be deſired.

To conclude therefore, as this appearance is really what may be called enchantment and Roſicrucian-work, *as it ſtands in nature*; ſo not only *Homer*, *Herodotus*, *Plutarch*, &c. but even *Lucretius*, *Democritus*, *Ariſtotle*, and others of that ſide, have repreſented it *as ſuch*. They never pretend to diſguiſe, or diſſemble the enchantment which we are often under, and feel with uneaſineſs and pain. Common experience would have given them the lie. *Macrobius* has gone ſo far, as to name five different kinds of this enchantment, ὄνειρος, ὅραμα, χρηματισμὸς, ἐνύπνιον, and φάντασμα, [*omnium quæ videre ſibi dormientes videntur, quinque principales ſunt diverſitates & nomina*, &c. In ſom. Scip.] Hence if there be any *imputation* or *reproach* in the preſent objection, no man who ever wrote on this ſubject is free from it. The only difference between *theſe Writers* is, That *ſome* of them have aſcribed this enchantment to *dead matter*, and *others* thought *ſome higher Agent* was neceſſary. And indeed if ever a dream was what might be called ὄραμα, or χρηματισμὸς, it would be ſtrange to make *dead matter* the *Agent*.

itſelf belonging to the ſoul, whereby it applies the perceptive capacity to read, as it were, theſe former impreſſions; or it is in general that power of the ſoul, whereby it directs the perceptivity to the conſideration of any former object. And this power *no way* depends on the matter of the body. It hath been ſhewn to be a contradiction to ſay, The ſoul cannot exert its active power without the help or inſtrumentality of dead matter. The ſoul muſt act upon matter firſt, to make it inſtrumental: and matter could not be the inſtrument of this *previous action*. See Sect. 4. N° 9. Note (*k*). Thus much of theſe two kinds of memory here: and we ſhould not forget the difference between them, becauſe, in a ſtate of ſeparation, the laſt ſort will be without impediment.

LIX. Now from this account of memory it ſhould follow, that every new impreſſion made on the ſenſory, ought to appear *new* to the ſoul: and yet we ſee it is otherwiſe with reſpect to the impreſſions made by theſe inviſible agents. It is one thing to ſee in ſleep perſons, *quorum tellus amplectitur oſſa* (as *Lucretius* expreſſes it) alive and before us, with whom we were once acquainted;

Quod ne miremur ſopor atque oblivia curant:

and quite another to ſee perſons, who on their being preſented for the *very firſt time*, are familiar to us, and ſeem to have had former concerns with us; to jump all at once into a train of *former action*, which we were never before concerned in; and to become inſtantly poſſeſſed of a *tract of experience*, which we never acquired! This is the moſt wonderful appearance, I think, in nature. Nothing but the actions of the *Deity* (which we admire, but do not pretend to account for) can exceed it. But whatever this may proceed from, whether from a different way of acting on the ſenſory; or ſome particular *power* and *efficacy*, which ſo affects the ſoul as to prompt it with an inſtantaneous knowledge of all objects thus offered to it; or whatever elſe may be the cauſe of it: we undeniably gather this material point from it, That the ſoul is capable of a more perfect and ready knowledge of things, than that which it attains to now, by the methods of *ſenſe* and *reflection*; where the labour in the acquiſition, and the trouble in retaining, is ſuperſeded: and that, as there is ſuch a *capacity* on the part of the ſoul, ſo ſpirits not the moſt perfect and powerful that we can conceive, may prompt it after this manner. This phænomenon is an *inſtance* and *experiment* of the thing itſelf. *Inveſtigation*, (whether it be concerning

concerning the natures of material objects, or in abſtract reaſoning) and *reminiſcence*, are the two moſt difficult things to the ſoul in its preſent ſtate: it requires time before we can make a ſufficient ſtock of obſervations, and then we muſt proceed laboriouſly in comparing, and drawing concluſions from them; but this undeniable circumſtance of our ſleeping viſions ſhews us, that all this trouble may be ſhortned, or rather become quite unneceſſary. It is true, we know that in a ſtate of ſeparation the ſoul muſt be freed from all reſtraint and impediment, becauſe *union to matter* limits and confines it; but ſtill we muſt conceive it uſing its own power and induſtry: whereas this qualification of our knowledge in ſleep diſcovers to us a ſurpriſingly new way, which we could have had no notion of without a *trial*. Without ſuch a trial and experience in ſleep, all the perfection of our waking ſtate could not have ſatisfied us that ſuch a method of affecting the ſoul was poſſible. The knowledge we are prompted with is not *bare information*, as when one tells us ſomething we knew not before; that would ſtill have appeared *new:* but this, upon firſt being ſuggeſted, is our *former knowledge*, if I may ſo expreſs it, a *familiar reminiſcence*. It is in this reſpect that our preſent method of *remembring* is loſt and ſwallowed up in a ſuperior ſpecies of memory. Let men conſider what concluſions this phænomenon will juſtify, either as to the aſſiſtance the ſoul may receive in an after-ſtate, or the enlargement of its own faculties; I ſhall mention only one particular, *viz.* That the ſeveral parts of our paſt conſciouſneſs (which we are perpetually loſing) may be recovered inſtantly, united together, and become one, by a firmer union, than the having recourſe to periſhable impreſſions on a corporeal organ, or our preſent method of reminiſcence in general; however differently that may be effected from the formal manner ſuppoſed in the laſt paragraph. And this muſt at leaſt appear poſſible, when a thing more difficult and incredible, cannot be denied to be real: for it is not by far ſo wonderful that we ſhould be prompted with the knowledge of what *hath been*, and been known too by ourſelves; as that the knowledge of things that never were, ſhould appear as belonging to our former conſciouſneſs (*l*).

LX. It

(*l*) Men pretend to doubt whether the ſoul can have any memory, when it hath no *impreſſions* on a material ſenſory to have recourſe to; but the preſent phænomenon ſhews, that *memory by no means depends on material impreſſions*, abſolutely ſpeaking. And if *this appearance* hath raiſed a doubt concerning the identity of our conſciouſneſs; it ſhould, in fairneſs of reaſoning, have ſatisfied that doubt again; conſidering that a *God of truth* preſides over all. A certain

great

LX. It will perhaps be objected, that this knowledge here argued from is *falſe* and *unreal*, an illuſion and cheat on the mind; and therefore that no inference ought to be drawn from it. To which it is anſwered *firſt*, that this, though in ſome caſes an illuſion, is yet *a true matter of fact*, and a *real phænomenon* in nature; which therefore, by the rules of philoſophy, may and ought to be argued form. *Ariſtotle*, *Lucretius*, and the other *Authors* mentioned above, have advanced hypotheſes to account for the whole appearance in a philoſophical way, (though they reckoned all but illuſion) which therefore they deſigned ſhould account for all the circumſtances of it. And here, by the way, let any one weigh, and add to the former arguments, the impoſſibility of accounting for this circumſtance mechanically. When a thing is reckoned an illuſion, it is the province of philoſophy to find out how the illuſion could be effected: in *Opticks*, when the place of the object is changed, and the dimenſions of it enlarged; this is apparent only, not real, and may be reckoned an illuſion: yet it is real and uſeful knowledge to underſtand the way how this is produced. And *ſecondly*, ſince the *manner of communicating a thing*, is independent on the thing communicated; this can be no objection againſt the manner of communicating this knowledge, let it be as falſe and deluſive as it will. If I am ſo affected in ſleep, as to know a man and his deſigns, though he hath no exiſtence but in viſion; might not I be ſo affected as to know this man and his deſigns, if he had a real exiſtence? There is *all the parity* here that needs be deſired, to make an inference. Beſides, other real and true knowledge, againſt which no exception could be made, might be communicated to us the ſame way. The *ſubject* imagined to be read out of the book, in the inſtance above, may be of the ſame kind with any of thoſe arguments that are enquired after by men at other times. If we ſhould ſuppoſe a man to dream that another made out a ſpeculative truth to him, (which, this inſtance, and perhaps the experience of ſome ſhews not to be abſolutely impoſſible to be done) this knowledge would be real. *That real matters of fact have been diſcovered in dreams*, I think even a philoſopher may allow to be morally certain. I

great *Author* ſays, "He takes his Being *upon truſt:*" ſo he might indeed, provided it was not from *chance*; that is no ſure foundation to truſt to. *Matter* is now altogether out of the queſtion, I preſume; and we are ſpeaking of the power of *immaterial Beings:* and it would be quite abſurd to think there is no *higher power* in nature, than ſuch as can deceive and impoſe upon us; that *Truth* hath not a *ſupreme Patron* in the Univerſe.

have

I have never heard of any man ſo incredulous as to refuſe it. *Ariſtotle* frequently mentions προορᾶλικοι, ſuch as *foreſee* in ſleep what is to come; and εὐθυόνειροι, ſuch as have *true dreams:* notwithſtanding the poor ſolution he offers of ſuch an extraordinary appearance. *Lucretius* affirms, rather than allows, that many reveal their own ſecret villanies in ſleep (*m*). This is truth of one kind at leaſt diſcovered, every way inconſiſtent with his principles. What Mr. *Hobbes* thought on this head, I have given a pregnant inſtance of above. The contradictory notions theſe men had of this appearance did not hinder them from confeſſing, and allowing, the circumſtances of it. Hiſtory is full of this, which our own experience ſhews, is no way impoſſible. *Sylla* wrote two and twenty books of commentaries of his own actions; theſe he inſcribed to *Lucullus*, whom he left tutor to his only ſon, paſſing by *Pompey*, and all the other men of power in the commonwealth: and in theſe commentaries he adviſes *Lucullus* to look upon nothing ſo firm and certain [ἔτως ἀξιόπιϛον ϗ βέβαιον] as what he was forewarned of in dreams (*n*). Now if we conſider all the circumſtances, this will appear very remarkable. *Sylla*'s character, whatever it might be in other reſpects, was far from lightneſs and vanity. And *Lucullus* calls this advice to mind, on a very ſignal inſtance of a dream, which I have already mentioned, whereby the city of *Sinope*, and all its inhabitants were ſaved from ruin. *Cyrus* in his dying ſpeech to his ſons, ſays the ſoul in ſleep becomes more divine, and ſees as it were into futurity (*o*). *Peticius*, a *Roman* pilot, the night after the defeat of *Pharſalia*, dreamt he ſaw *Pompey*, not as he had often ſeen him in *Rome*; but ſad and dejected, coming forward and ſpeaking to him. In the morning, as he was telling this

(*m*) *Multi de magnis per ſomnum rebu' loquuntur,*
Indicióque ſuo facti perſæpe fuere. Lib. 4. ver. 1012.

And again more expreſly,

Nec facile 'ſt placidam ac pacatam degere vitam,
Qui violat factis communia fœdera pacis.
Et ſi fallit enim Divum genus, humanúmque,
Perpetuò tamen id fore clàm diffidere debet,
Quippe ubi ſe multi per ſomnia ſæpe loquentes
Aut morbo delirantes, procraxe feruntur,
Et celata diu in medium peccata dediſſe. Lib. 5. ver. 1153.

This is *too little* to keep the world in awe; and yet it is *too much*, for *chance* or *mechaniſm* to perform.

(*n*) See *Lucullus*'s life in *Plutarch*, as alſo *Sylla*'s; for it is written in both.

(*o*) Let it be remembered that *Xenophon* writes this, the fineſt Writer, and one of the greateſt men of antiquity.

melancholy

melancholy ſight to thoſe that were aboard with him, they came and told him that a ſmall veſſel drew nigh, and that thoſe who were in it waved their garments, deſiring to be received. When it was come cloſe, and *Peticius* had come up, he ſaw the ſame ſight he had ſeen in his ſleep, *Pompey the Great in a ſad reverſe of fortune*, [——ἐπισὰς ἦν Πετίκιος, ἐυθὺς ἔγνω τὸν Πομπήϊον, οἷον ὄναρ εἶδε· ϗ πληξάμενος τὸ κεφαλὸ, &c.] Now, though I do not argue from particular matters of fact in ſuch relations; but only alledge them as things no way improbable or abſurd, being agreeable to the common ſenſe of mankind in ſuch caſes: yet here, though I would, I know not what to deny; *Plutarch*'s veracity, or *Peticius*'s ſincerity in contriving off hand a ſtory, which was immediately followed with the event. I might inſtance *Pelopidas*'s dream before the famous battel of *Leuctra*, or *Timoleon*'s before his expedition into *Sicily*; with a thouſand others. The firſt of theſe was ſuch as could not have been contrived after the event, nor concealed before: the *chief Men* in the army were called together to conſult about it; there was a warm conteſt between the *Generals* and the *Prieſts*, whether it ſhould be obeyed literally; and when they came to a reſolution, the affair was communicated to the *whole army*. And a publick act of the whole city of *Corinth* followed upon the laſt. If ſuch things are allowed, more will follow than I contend for here; *viz.* That things to come, have been actually foretold in dreams: let others determine concerning the power of ſuch a Being as can foreknow future events.

LXI. Moreover, as to the preſent ſubject, let us reflect that the repreſentations of perſons and actions in ſleep, are *pictures* made by impreſſions on the ſenſory; and the ideas of real perſons and actions, which we have while awake, *are only ſuch pictures* with reſpect to the ſoul itſelf; there is nothing more real in the one ſort of repreſentation than the other: therefore the ſoul is made to do as much, when it enters into the deſigns and plots of the one, from ſuch repreſentations, as if it entered into the deſigns of the other, from the ſame, or an equal repreſentation. And it is made to do a great deal more, when it becomes conſcious of former tranſactions (which never were) between the *firſt ſort*, and it; than if it became conſcious of tranſactions, which have been between the *laſt ſort* and it, though now long forgot. Let us make a ſuppoſition that a man walking in a ſolitary place, in a country where he had never been before, ſaw before him, by the power of enchantment, a great houſe, and that

his curioſity led him thither, where he finds a numerous family of ſervants, and other people, variouſly occupied about their domeſtick affairs or diverſions: this man might eaſily be excuſed, if he took this crowd of people for real men and women, buſied in real action, not being on his guard againſt illuſion, nor perhaps having power to be ſo: but then he might alſo be excuſed, if he took them all for ſtrangers to him, and behaved himſelf as in a place, and among company unknown; ſince this is the natural way to behave on ſuch occaſions. But if farther, he ſhould be *ſo affected* by the force of this inchantment, as to know them all familiarly at firſt ſight, to underſtand their buſineſs, and deſigns, and characters, as if he had had a long acquaintance and familiarity with them; if he ſhould all in an inſtant begin to act his part, as if he were one of them, and do what it was expected he ſhould do; if he ſhould converſe with them, as in conſequence of a long familiarity; if he ſhould have a conteſt with one, upon the account of an old grudge, and lie under obligations to others for former favours, *&c.* the wonder might juſtly ſeem doubled. Such an extravagant relation as this could not meet with belief among the moſt ignorant and credulous: and yet it is no more than what happens literally to ſome of us every night in our dreams. Surely it is becauſe there is a *God of truth*, who ſets boundaries to the power of theſe Beings, that we are not deluded into the extremeſt Scepticiſm by them; that our waking ſenſes are not ſo bewildered with inconſiſtencies of *facts* and *perſons*, as to confound human reaſon; and that we are not led by them every minute to purſue that which would be our ruin! This is that which, as hath been obſerved before (N° 6.) *no mechaniſm, no ſolution or hypotheſis* can account for; it is *touching the ſoul* in another manner than by the bare exhibiting of viſion to it: one who conſiders it right, will be ſurpriſed that *matter*, *mechaniſm*, *traces*, ſhould be offered as the cauſe. Now in this caſe, it is the ſame thing with reſpect to the man's being prompted with a knowledge of theſe imaginary perſons, as if they were real. And by whatever way it is that he is endued with this extemporary experience of a whole paſt life, or by whatever way it is that we are endued, in like inſtances, with the knowledge of a train of paſt *unreal* actions; the ſame power, the ſame way applied, not to ſpeak of a greater, could make us enter *in a twinkling*, into all the real knowledge and conſciouſneſs, which the perfections of *God*, and the conſiſtency of the moral world demands. To grant the one, and doubt of the other, is to allow that there may be an *evil principle* in the nature of things, ſuperior to the *good One*, a prin-

a principle who hath power to pervert truth, and repreſent things as *they are not*; while the other cannot preſerve it, nor repreſent things as *they are*.

LXII. To end this tedious eſſay: we may obſerve *two things* which chiefly tend to make us ſceptical with regard to the exiſtence of ſeparate ſpirits, and their power. Firſt, when by the help of a little philoſophy we come to have immoderate notions of the *natural powers of matter*, as they are called: we then do not think the agency of any ſpirit neceſſary, and that matter hath all the powers and virtues that a Philoſopher ought to admit of. Yet a cloſe ſurvey of matter, its origin and conditions, beſt of all things ſhews this to be quite otherwiſe. The other is a prepoſterous, if not pretended care, not to weaken the minds of children and young people (*p*). There will be idle ſtories of ghoſts and apparitions, as long as the world ſtands, as there are falſe reports concerning every thing that is true. We ſhould not ſurprize and fright young perſons with ſilly, idle relations, which may have an ill effect on their tender minds: but to avoid this, which is not the greateſt inconvenience they may fall into, much diſcretion is to be uſed. We ought not to tell them that all theſe things are groundleſs and abſurd; but own that there is a poſſibility of them; and that God only can protect us from their power and malice, if we firmly truſt in him. *Reaſon* is ſtrongeſt, holds beſt with any age, and is that which will endure: and one who is capable of obſerving what occurs to his mind in ſleep, and curious to know how it may be, is capable of having a rational account of it given him. It is not impoſſible that one who believed the exiſtence of ſeparate ſpirits, and that they are conſtantly in company with him, (for I am apt to think this is true, whatever we believe) might be able to be alone in the dark, or in a room by himſelf, without fear. There is no true courage, but what is built

(*p*) It is long ſince this was a Sceptical pretence. In the *Philopſeudes* of *Lucian*, mentioned before, *Tychiades the Sceptick* affectedly cautions the vain old men, that they ſhould not talk ſo idly, if it were but for the ſake of the two young Lads who were preſent; becauſe this might fill their heads with Goblins and Spectres, that would haunt them as long as they lived. Thus far he was right; we ſhould not talk idly before young or old: we need talk nothing of this, but give conſiſtent accounts to *young perſons*, as ſoon as they are capable of them, or want them to ſolve ſome doubt; but there is a great difference betwixt proceeding thus with them, and endeavouring to make them ſturdy againſt the belief of Spirits, by telling them there are no ſuch things, nor reaſon to believe any accounts of this kind. Out of an over-great zeal to have them *ſtrong*, we bend them to the ſide of *Scepticiſm*, as if that were a leſs weakneſs.

upon a rational foundation. And to be convinced that a *Being of infinite perfection* rules over all; and to have nothing, or nothing beyond the conſequences of human infirmities, to fear from him, is this foundation. Men were formerly credulous and eaſy perhaps: now they are affectedly nice, with the air of more philoſophy and knowledge: but our Moderns forget that he, who believes that dead matter can produce the effects of life and reaſon, is a hundred times more credulous than the moſt thorough-paced Believer that ever exiſted.

SECT. VII.

Dean Berkeley's *ſcheme againſt the exiſtence of matter, and a material world examined, and ſhewn inconcluſive.*

SOME men deny all *immaterial*, and others all *material* ſubſtance; ſo that between them they leave *nothing at all* exiſting in nature. Theſe two oppoſite *parties* help to expoſe each other; and it is hard to ſay, every thing conſidered, whoſe ſhare is greateſt in the abſurdity of *expunging all Being out of exiſtence*. Yet thus much we may obſerve, that the exiſtence of *both ſubſtances* muſt be very plain, ſince each ſide maintains that the exiſtence of the ſubſtance which they themſelves aſſert muſt be ſelf-evident: for it would be abſurd in either of the parties to ſuppoſe arguments *neceſſary* to prove that any thing at all exiſts. Our dreams having no real external objects, and ſome of the *ancient Writers* having ſuggeſted that *this* might be made a ground for doubting whether there were really any ſuch objects; a late ingenious and learned *Author* hath taken the hint, not only to doubt of the reality of matter and a material world, but to pretend to demonſtrate *the exiſtence of any ſuch thing impoſſible and contradictory* (*a*). The attempt certainly is ſurpriſing.

If

(*a*) Whatever way our dreams may be accounted for, whether by thin membranes riſing from the ſurfaces of bodies, as *Democritus* thought; or motions continued in the ſenſory after the objects ceaſe to act, as *Ariſtotle* and *Hobbes* maintained; or by *new impreſſions* made upon it in the time of ſleep, as I have endeavoured to ſhew in the laſt Section: all theſe ways ſtill

If his books had been written with a deſign to excite men to try what they could ſay, in caſe *ſuch a kind* of Scepticiſm ſhould begin to prevail;

ſuppoſe the real exiſtence of matter, in ſuppoſing both a *ſenſory* and *objects* acting upon it. Hence it ſeems inconſiſtent in *Plato*, to think the exiſtence of matter might be called in queſtion from this appearance of our dreams; ſince on any *hypotheſis* for ſolving it, the *exiſtence* of matter muſt be allowed: or *if it be not allowed*, all indeed is but a dream, even while we are awake, and the *very diſtinction* between dreaming and not dreaming is taken quite away. For what reaſon can we have to argue that objects are imaginary and *unreal*, while we are awake, becauſe they are imaginary and *unreal* while we ſleep; if we allow no previous difference? Waking itſelf is made but the moſt deceitful dream, and we then determine the queſtion, without referring to dreams, and take away all difference between the two ſtates, as to the reality of external objects. And if we previouſly allow a difference, how can we infer from allowing a difference, that there is no difference? We thus cut off the concluſion a contrary way. Therefore we can never draw the deſigned inference, let us make which of the ſuppoſitions we pleaſe. This is generally the fate of ſcepticizing; *The deſign fruſtrates itſelf.*

To make this a little plainer. If matter be ſuppoſed *neceſſary in the repreſentation of this phænomenon* of dreaming, it muſt be contradictory to infer from the phænomenon *itſelf* that matter does not exiſt. And if matter be ſuppoſed not to exiſt in the repreſentation of the phænomenon; it muſt be equally abſurd from ſuppoſing it *not to exiſt*, to infer that there*fore it does not actually exiſt*. There is no difference made on that ſuppoſition between the appearances of objects in ſleep, and their appearance at other times; *i. e.* the difference on which the argument proceeds, *is taken away* by the very ſuppoſition of the argument; and it is made to contradict itſelf, as before.

If it ſhould be ſaid, that it is not neceſſary *to make any ſuppoſition at all* concerning the exiſtence of matter in this appearance, but to take the appearance itſelf as we find it: I anſwer, *firſt*, That is impoſſible; the *queſtion* is concerning the exiſtence of matter, and it is to be proved dubious from a certain appearance; therefore it muſt be ſuppoſed either *dubious*, or not *dubious*, before-hand. And, *ſecondly*, not to conſider with exactneſs and care every circumſtance of an appearance, from which we would infer ſuch a weighty inference, as the exiſtence of a material world, ſhews a *willingneſs* to miſtake, or miſrepreſent things in this momentous affair. And, *thirdly*, to ſay it is not neceſſary at all to make any ſuppoſition concerning the exiſtence of matter in this caſe, is to ſuppoſe that the *appearance* may be produced indifferently, whether matter exiſt, or not; and that again is to contradict all the evidence we have for the exiſtence of matter in a waking ſtate, before we come to doubt of it from the appearance of dreaming; or it is to confound the diſtinction of the two ſtates, from which nevertheleſs we pretend to raiſe our doubt and ſuſpicion. Wherefore at any rate it is inconſiſtent to think this appearance can afford us a ground of doubting.

Whether our Author could have any other ground to call the exiſtence of matter in queſtion, ſhall be conſidered afterward; though it ſeems evident in itſelf, that the reality of external objects could never have been queſtioned, unleſs we had ſome time or other been deceived in this point, either while aſleep, or while awake. Had not this happened, all ſuſpicion would have been prevented, and doubting thought a piece of extravagance.

or as an *exerciſe* in an univerſity, to ſhew how far wit and invention might go to maintain a paradox, there had been little in it: but when a perſon of great capacity and learning ſeems ſerious, and writes pieces, one after another, to ſupport this kind of Scepticiſm, and continues in theſe ſentiments for ſuch a number of years; if it be not carrying an ungenteel ſort of a *banter* a great deal too far, one cannot tell what to think of it. For it ſeems impoſſible that a man ſhould be ſeriouſly perſuaded that he has neither *country* nor *parents*, nor any *material body*, nor *eats*, nor *drinks*, nor lies in a *houſe*; but that all theſe things are mere *illuſions*, and have no exiſtence but in the fancy.

That which makes it neceſſary here to examine this ſcheme, which denies the poſſibility of matter, is becauſe all the arguments I have offered for the *Being* of a *God* in Sect. 1. and 2. above, are drawn from the conſideration of this *impoſſible thing*; *viz.* from the *inertia* of matter, the *motion* of matter, the *cohesion* of matter, *&c.* and every one ſees what impropriety, or rather what repugnance there muſt be, to ſpeak of the *vis inertiæ* of ideas, the *motion* or *gravity* of ideas, the *elaſticity* or *coheſion* of ideas. Whence theſe arguments muſt amount to nothing, if there be nothing but ideas inſtead of the objects of our ideas, as being drawn from *properties* which can belong to no ſubject, and which therefore muſt be *impoſſible*. Thus there muſt either be no truth in what I have ſaid, or in what this *Author* advances; for *two ſuch oppoſite accounts of nature* cannot both be true: and if the concluſions in theſe two Sections be ſolid, this it ſelf will be a weighty argument againſt his ſcheme. However, I ſhall here endeavour to ſhew the inconcluſiveneſs of it from reaſons particularly applied; and try at leaſt to remove ſo weighty an objection, if I cannot add more light to what hath already been ſaid.

II. In conſidering this new ſcheme, the following particulars are to be remarked. The *nature* or *eſſence* of things is altogether different from their *exiſtence*; the former being the ideas in the Divine Intellect, eternally conſiſtent ſo as to be made to ſubſiſt together in the ſame ſubject, by his power, whenever it ſhould ſo ſeem good to his wiſdom: the latter, *viz.* their exiſtence, then commences, when his power is exerted to this effect; or when this *co-ſubſiſtence* of properties is firſt actually effected, with reſpect to a determined time and place (*b*). And from thence it follows,

(*b*) In the *Univerſal Dictionary*, or *Cyclopædia*, under the word *Exiſtence*, it is obſerved, that the exiſtence of created Beings hath relation to *time*, *place*, and a *cauſe*: That *eſſence* is explained

follows, that there are eternal properties in the natures of all things, as being originally, eternally conſiſtent ideas; for the eternal conſiſtency and agreement of theſe ideas, makes theſe eternal properties. And from hence again it follows, that we can demonſtrate ſeveral eternal truths concerning the *natures* or *eſſences* of things: for to ſhew the neceſſity, or neceſſary conſiſtence, of theſe eternal properties, is to demonſtrate eternal truths concerning their natures. To exemplify this. *Solidity* and *extenſion* were eternally conſiſtent in the divine ideas, ſo as to be made to ſubſiſt in the ſame ſubject, (of which ſubject indeed we have no idea; but God hath, and had it before the ſubject itſelf was:) this eternal conſiſtency makes the nature of this *thing* eternal. There was farther, a neceſſary connexion between the ideas of *ſolidity* and *reſiſtance*; if it did not reſiſt it would be unſolid: or the idea of *not reſiſting* is inconſiſtent with the idea of *ſolidity*. Moreover, there was an inconſiſtency between the idea of *reſiſting* and the idea of *effecting* what it reſiſted, [*viz.* a change of its preſent ſtate.] And therefore from this reſpect, or habitude, of theſe ideas to each other, this property, That it is impoſſible this *thing* ſhould ever effect a change of its preſent ſtate, *eternally* and *neceſſarily* belongs to the nature of it. And therefore, when we ſhew the neceſſity of this property, we demonſtrate an eternal truth concerning the nature of this *thing*. Therefore, as before, I infer that we can demonſtrate ſeveral eternal truths concerning the *natures* or *eſſences* of things (*c*).

plained by the chief and radical property of a thing, or all the properties and *exiſtence* by ſpecifying the time, place or cauſe; and then it is added,——"The foundation and occaſion of this diſtinction, is this; that *eſſence* belongs to the queſtion, *What is it? Quid eſt?* But *exiſtence* to the queſtion, *Is it? An eſt? 3tio, Exiſtence* neceſſarily preſuppoſes *eſſence*, and cannot be conceived without it; but *eſſence* may be conceived without *exiſtence*; in that *eſſence* belongs equally to things that are *in potentiâ*, and *in actu*; but exiſtence only to thoſe *in actu*. Note however, that this does not obtain in *God*, about whoſe *nature* and *eſſence*, the mind cannot think, without conceiving his *exiſtence*." By being *in potentiâ* here, muſt be underſtood, being producible by the power of God, according to his ideas. Farther, *nature* and *eſſence* are here ſynonymous, and, I think, rightly. *Laſtly*, It is well obſerved here that as *eſſence*, *nature*, eternal properties, or eternal truth, have no relation to a *particular time*; ſo neither have they to *place*, or *cauſe*; or, they are as little circumſcribed in *place* as *time*; and to have a *cauſe* is incompetent to them, being eternal. This is one way of coming at a view of the eternity and immenſity of the *neceſſary Mind*, where theſe were eternally known.

(*c*) The natures of things with reſpect to us, are the conſiſtent ideas in our minds, which are copies (though but imperfect, and in part) of the eternally conſiſtent ideas in the divine Mind.

III. On the other hand, the *exiſtence of things* hath no eternal properties; that is, eternally conſiſtent, or neceſſarily related ideas, belonging to it. Theſe were all in the Divine Mind, long before any thing but himſelf actually exiſted; and belonged to their *natures*, not their *actual exiſtence*, which was arbitrary and depended upon his good pleaſure to effect. The property juſt now mentioned, *v. g.* is no way predicable concerning the exiſtence of matter, nor true only when it exiſts; but concerning its nature, and true whether it exiſts, or not. Therefore there is no eternal truth demonſtrable concerning the exiſtence of Beings, (the *neceſſarily exiſting Being* excepted, who is out of the preſent controverſy) unleſs it be this, That their exiſtence was eternally poſſible, as depending upon his pleaſure, and being performable by his power: for ſuch truth would have ſuppoſed ſuch eternal neceſſary properties predicable concerning their exiſtence; or that it had been neceſſary (*d*). Therefore, ſince the exiſtence of *matter*, the *ſoul* of man, or other finite immaterial *Beings*, is only poſſible, or contingent, the only queſtion concerning their exiſtence is, *Whether it be actually effected, or not?* It is not demonſtrable as the exiſtence of God is; for his exiſtence is a part of his nature, and inſeparable from it: but there is no neceſſary connexion between *their nature*, which was eternal in the Divine Mind, and *their exiſtence* which is only poſſible. Nor can there be a connexion between any thing that is neceſſary, and a thing that is but barely poſſible.

IV. Thus it appears that to require an *abſolute demonſtration* of the exiſtence of matter, of the ſoul of man, (of man in general, I mean, for no man wants a demonſtration of the exiſtence of his own ſoul) or of other finite immaterial Beings, is to miſtake the nature of ſuch a demonſtration, and of the ſubject it is converſant about. It is to require a demonſtration of the neceſſary exiſtence of thoſe Beings, whoſe exiſtence, *ex conceſſis*, is contingent: for ſuch an *abſolute demonſtration* muſt have been always true; juſt as any demonſtration of the property of a *geometrical figure* was always true. That is, it muſt have been always true that matter exiſted. Suppoſing a poſſible being really exiſted, there is no other way

(*d*) The exiſtence of a thing, which is but barely poſſible, implies no contradiction (abſolutely ſpeaking) never to be; otherwiſe its exiſtence would become ſome time or other neceſſary; and that eternal properties ſhould belong to a thing that may never be, is abſurd.

to

to ſhew the exiſtence of it to another, but by the *effects* it produces, or the *perceptions* it raiſes in ſome percipient Being; or by ſhewing it would be an abſurdity for ſuch *effects*, or *perceptions*, to have any other cauſe.

V. Yet becauſe this contradiction, *viz. That a contingent Being, exiſts neceſſarily*, cannot be demonſtrated; ſome men have unskilfully reſolved to make a doubt of it, Whether matter actually exiſted. This is a wilful, determined kind of Scepticiſm: becauſe a contradiction cannot be ſhewn true, therefore they *reſolve* (nay I may ſay *force* themſelves) to doubt; and if it could be ſhewn true, there would be no need of forcing themſelves to become Scepticks; for it would be unavoidable. All truth, as hath often been ſaid, ſtands or falls together. The exiſtence of *neceſſary* and *contingent* Being would be upon the ſame level: either all Being would be but barely poſſible, and once nothing at all might have exiſted; or all Being ſhould be equally neceſſary, and nothing that exiſts could ever have not exiſted.

VI. *Matter* therefore, the *human ſoul*, and other *finite ſpirits*, are contingent Beings: the idea of matter, *v. g.* was eternally conſiſtent in the Divine Mind, and is conſiſtent in our minds: but the idea of any thing impoſſible to exiſt, or of an impoſſible effect, can never be conſiſtent. The reaſon is, an inconſiſtency in the idea and conception. And this ſhews the poſſibility of matter's exiſting, whenever it ſhould pleaſe Infinite Wiſdom. Since therefore the exiſtence of it is poſſible, nor implies any contradiction; it is impoſſible for any man to demonſtrate the non-exiſtence of it. For that would be to undertake to demonſtrate a poſſibility *impoſſible*. This, in few words, might be an anſwer to, and ſhews us the abſurdity of, Dean *Berkley*'s undertaking, who (as I ſaid) pretends to prove, that the exiſtence of matter, or bodies, out of a mind, is a contradiction in terms (*e*). He all along allows the conſiſtency of the idea of it; and yet contends, by a new kind of reaſoning, that the object of this conſiſtent idea implies a contradiction in terms to be made exiſt: for by the ſame argument, whatever it be, he might prove that any thing, beſides the Deity, implies a contradiction in terms to be made exiſt; or deny

(*e*) Under the word Body, in the *Cyclopædia*, a part of the long citation from Dean *Berkley* is——"On the whole it appears, that the exiſtence of bodies out of a mind perceiving them, "is not only *impoſſible* and a *contradiction in terms*; but were it poſſible, nay real, it were impoſ- "ſible we ſhould ever know it."——

entirely

entirely a creating power to him; ſince the conſiſtency of the ideas in the Divine Intellect is that which conſtitutes the poſſibility of the exiſtence of all other things. If we add to this, that the exiſtence of body without the mind; or of a *real*, *ſolid*, *figured*, *diviſible*, *reſiſting ſubſtance*; for the idea of it in the mind is no more ſuch a ſubſtance, than the idea of a Centaur is a *real Centaur*; if, I ſay, we add to this, that the exiſtence of matter hath all the evidence for it, as will ſoon appear, that the nature of the thing can admit of, without requiring the contradiction above to be proved; it is not eaſy to gueſs what juſtifiable deſign a man could propoſe to himſelf in ſuch an extraordinary attempt, as to demonſtrate that the beautiful ſyſtem of material nature; heaven and earth; the ſun, moon, and ſtars; the bodies of men and beaſts; all the wonders in the vegetable and animal œconomy; their uſefulneſs to mankind; and the kindneſs of God in beſtowing them, *are nothing but a dream within the mind.*

VII. But to be more particular as to the nature of this undertaking: A man who believes there is no ſuch thing as a *ſolid*, *reſiſting*, *figured ſubſtance*; *no material world*; *no ſuch Beings as men*, compounded of *body* and *ſpirit*; in fine, *no books*, *writing*, *printing*, *ſpeaking*, *&c.* but that all theſe are ideas in the mind only, having no exiſtence without it; can never propoſe conſiſtently with his own belief, to diſpute *with men*, or propagate his doubting among them. He knows not *what things* they are which he would convince, or if there be *any Beings* differing from him in opinion: for all theſe ideas that are excited in him, as of Beings maintaining the contrary of what he maintains, may be only ideas raiſed in him, by ſome ſpirit that hath a deſign to make a fool of, and impoſe upon him; as he thinks all the world beſides are cheated with other deluſory ideas: What greater evidence hath he for the exiſtence of other men's *ſouls*, than of their *bodies*; though he may have more for that of his own? We only collect concerning the ſouls of other men from the *ſpontaneous motions*, and *actions* of their *bodies: theſe*, according to him, *belong* to nothing. Beſides, he hath nothing but ideas, or dreams, when he ſpeaks, writes, publiſhes books. How doth he pretend that theſe dreams of his ſhould be communicated to other Beings, granting that they exiſted? In ſhort, his whole enterprize proceeds upon the ſuppoſition of the reality of what he is going to confute. And thus, I think, he puts it in his adverſary's power, to prove from the very nature of his attempt, that he doth not believe himſelf, and ſo to confute him without uſing any other arguments.

This is the fate of the generality of Scepticks: their very design opposes and defeats itself, as may be observed in other cases (*f*). A man of this belief,

(*f*) This is observable in the *antient Scepticks*, the followers of *Pyrrho*, those who first affected to be distinguished by that name, and to be reckoned a *separate Sect*. They pretended to *give a demonstration*, to prove that no demonstration could be given, which was very extraordinary; for if their demonstration *was true*, the design of it was defeated; and if it were *not true*, the design of it would still be defeated: and at any rate they could not believe themselves. *Diogenes Leratius* says, (in the life of *Pyrrho*) "They took away *all demonstration, judgment, sign, cause, motion, learning, generation*, and that any thing was *good* or *evil* by nature;" and then gives their general Demonstration for all this——Ἀνήρουν δ' οὗτοι καὶ πᾶσαν ἀπόδειξιν, καὶ κριτήριον, καὶ σημεῖον, καὶ αἴτιον, καὶ κίνησιν, καὶ μάθησιν, καὶ γένεσιν, καὶ τὸ φύσει, τὶ εἶναι ἀγαθὸν ἢ κακόν. [their demonstration of this follows] Πᾶσα γὰρ ἀπόδειξις (φασὶν) ἢ ἐξ ἀποδεδειγμένων σύγκειται χρημάτων, ἢ ἐξ ἀναποδείκτων· εἰ μὲν οὖν ἐξ ἀποδεδειγμένων, κἀκεῖνα δεήσεται, τινὸς ἀποδείξεως, κἀ ἐντεῦθεν εἰς ἄπειρον· εἰ δὲ ἐξ ἀναποδείκτων, ἤτοι πάντων, ἢ τινῶν, ἢ καὶ ἑνὸς μόνου διϛαζομένου, καὶ τὸ ὅλον εἶναι ἀναπόδεικτον. Here is a Demonstration in *rigorous form*. And, as if one general demonstration was not enough, they proceed to give particular demonstrations concerning *all the points* mentioned. Here, by the by, we may observe, that even *denying* supposes some certain principle; otherwise there could be no reason for denying any thing (as was observed before) more than for affirming; and that the *Sceptick* or *Pyrrhonist*, while he blames other men for the presumption of affirming and maintaining, *affirms* and *maintains* out of opposition, and that with great vehemence; in which case he acts quite out of character; for to be consistent with himself, he should observe a profound silence. [See Sect. 5. N° 2. and the Note (*b*) N° 3.]

But how do they support the character of *doubting* in all this fury and heat of *maintaining* and *affirming*?——Why, nothing is more easy. They *affirm* and *maintain* that their arguments, after they have overthrown all other arguments, at length overthrow themselves, like a dose of physick, which last of all purges itself off.——Καὶ αὐτῷ δὲ τούτῳ τῷ λόγῳ λόγος ἀντίκειται· ὃς καὶ οὗτος μετὰ τὸ ἀνελεῖν τοὺς ἄλλους, αὐτὸς ὑφ' ἑαυτοῦ περιτραπεὶς ἀπόλλυται· κατ' ἴσον τοῖς καθαρτικοῖς, ἃ τὴν ὕλην προεκκρίναντα, καὶ αὐτὰ ὑπεκκρίνεται καὶ ἐξαπόλλυται. Ibid. Thus they are satisfied, provided their reason had the honour of being overthrown by nothing *but its own force*. They *affirmed*, That we must not affirm *that there are four elements, because there are four elements*.——Οὐδὲ γὰρ τὸ τέτταρα εἶναι τὰ ϛοιχεῖα, ἐκ τοῦ τέτταρα εἶναι τὰ ϛοιχεῖα, βεβαιωτέον. That we must either say, *every thing is true, or every thing is false*.——Ἤτοι γοῦν πάντα ἀληθῆ ῥητέον, ἢ πάντα ψευδῆ. They said things were *hot* or *cold*, not from any natural quality, but by *law* and *custom*.——Δημόκριτος δὲ τὰς ποιότητας ἐκβαλὼν· ἵνα φησὶ, Νόμῳ ψυχρὸν, νόμῳ θερμόν. Accordingly, *Demophon* was *cold* in the *sun*, and *warm* in the *shade*.——Ἐν σκιᾷ ἐθάλπετο, ἐν ἡλίῳ δὲ ἐῤῥίγου. They did not all agree whether they should be called *Pyrrhonists*, or not; because allowing that they knew *Pyrrho*'s sentiments, was allowing that they *knew something*, contrary to their great *principle*.——Εἰ γὰρ τὸ καθ' ἑκάτερον κίνημα τῆς διανοίας ἀληπτόν ἐστιν, οὐκ εἰσόμεθα τὴν Πύῤῥωνος διάθεσιν· μὴ εἰδότες δὲ, οὐ Πυῤῥώνειοι καλοίμεθα ἄν. This was the *accuracy* of doubting!

But none of *Pyrrho*'s followers came up to his own pitch; for having taken away the distinction between *honest* and *dishonest*, *just* and *unjust*; having found out that *nothing was according to truth*; that men acted by *custom* or *law*, not according to *nature*, because any thing was

lief, not to contradict himself, should never open his mouth, (the *idea of his mouth*, perhaps I should say) but lament *in silence* the misery of his con-

was not *that very thing* more than *another thing*; he set about making his life agreeable to his *principles*; (if we could say that a Sceptick had principles against *their own principle*;) he avoided no danger, would not stir out of the way; though a *chariot* or *waggon* was to go over him; would not go about, if a *precipice* was before him, nor beat off a *dog*, if he came upon him; and in this rigid observation of his principles, his friends were obliged to follow him, to prevent accidents. I shall still give my authority.——Οὐδὲν γὰρ ἔφασκεν ὅτε καλὸν, ὅτε αἰσχρὸν (says his Historian) ὅτε δίκαιον, ὅτε ἄδικον· καὶ ὁμοίως ἐπὶ πάντων, μηδὲν εἶναι τῇ ἀληθείᾳ, νόμῳ δὲ καὶ ἔθει πάντα τοὺς ἀνθρώπους πράττειν· ἃ γὰρ μᾶλλον τοῦτ᾽ ἢ τόδε εἶναι ἕκαστον· ἀκόλουθος δ᾽ ἦν τῷ βίῳ, μηδὲν ἐκτρέπεσθαι, μηδὲ φυλαττόμενος, ἅπαντα ὑφιστάμενος, ἀμάξας, εἰ τύχοι, καὶ κρημνούς, καὶ κύνας, καὶ ὅσα τοιαῦτα, μηδὲν τοῖς αἰσθήσεσιν ἐπιτρέπειν· σώζεσθαι μέντοι (καθά φασιν οἱ περὶ τὸν Καρύστιον Ἀντίγονον), ὑπὸ τῶν γνωρίμων παρακολουθούντων. If he would yield nothing to his senses (as here 'tis said) he should not (agreeably to his *own principles* it seems) have at all made use of them, nor walked upon his legs, nor done as other men do; but lain in one place, without motion or action. He was once greatly ashamed for having driven away a dog that would have torn him, and made a scrupulous apology for acting against his principles. But of this enough.

Now where can we expect to get free from *bigotry*, if it runs to such heights in *Scepticism itself?* It is impossible those men could understand or believe themselves; and yet we see to what absurdity their zeal for *maintaining* [one cannot tell what] carried them. How little reason therefore have men of this way of thinking to object *credulity* and *bigotry?* The man who refuses his assent to plain truths, is every way worse, and commits a greater violence on his faculties, than he who believes things without sufficient proof: and certainly more *sophistry*, *cunning* and *disingenuous shifting* is required to maintain that *Truth cannot be found out*, than there would honest application and industry to find it out: and farther, since this is the great principle of *Academism* and *Scepticism*, *That Truth cannot be perceived*, on maintaining of which their honour is staked; the men under these denominations cannot be said so much to have a *disposition* to find out the truth, as a *fixt resolution* to oppose it. *Cicero* does all he can to make good *Pyrrho*'s ἰσοσθένεια τῶν λόγων, or equality of arguments on both sides; he *labours* to keep a due balance between *truth* and *falsehood*. It is mean and unworthy to see him, upon this account, endeavouring to undermine the truths in geometry, by little impotent cavils. Mr. *Bayle*, in his Controversy concerning the preferableness of *Atheism* to *Superstition*, doth not so much as endeavour to keep the balance; but leans with all his force to the wrong side. And a certain great Author is sometimes a *Dogmatist*, and gives us a scheme of virtue independent of any Deity; and sometimes a regular and precise *Academist*. "There "is nothing so foolish and deluding (says he) as a partial Scepticism. For while the doubt is "cast only on one side, the certainty grows so much stronger on the other." Can any thing be more absurd than to cast the doubt upon two *opposite* and *contrary propositions*, as if both might be false, or both true! I do not mean that objections should not be put with all their force: but there are some truths so glaring that a man cannot *cast doubt upon them*, without committing much violence on his reason. The art of writing is made to consist in keeping an æquilibrium between the arguments on opposite sides. This may catch a little vain applause; but it is against the interests of truth, and against the (rational) nature.

dition, his lonely ſtate, and the miſt and darkneſs he is inextricably bewildered in.

And this argument from the *inconſiſtency of the method* is applicable to him who but barely doubts, if he offers to diſpute with the *Beings themſelves*, in order to be ſatisfied *himſelf* whether *they are*; or to convince *them* that *they are not:* for this diſputing ſuppoſes the *reality* of the thing he pretends to doubt of (*g*). But when one undertakes to demonſtrate to us, *that we have nothing whereby another could know that we exiſt*; ſince he cannot do this, but by ſuppoſing the *truth* of what he pretends to demonſtrate *falſe*, one is at a loſs what notion to form of ſuch a procedure. He may be juſtified, I think, in ſaying, "The ſtrangeneſs of the attempt is "not to be paralleled." And how our Author can be vindicated from this contradictory procedure, I do not ſee: for he pretends to demonſtrate the impoſſibility of the exiſtence of mens *bodies*, and thereby denies all evidence that other men can have for the exiſtence of their *ſouls*; which indeed amounts to denying their exiſtence altogether, and demonſtrating the impoſſibility of it to *thoſe very Beings* at the ſame time.

VIII. The great reaſon why this Author pretends to doubt of the exiſtence of material ſubſtance, or to demonſtrate it impoſſible, is becauſe *we are percipient of nothing but our own perceptions* and ideas; and becauſe *figure*, *colour*, *reſiſtance*, *&c.* is not this ſubſtance (*h*). Now (to obſerve here

(*g*) Mr. *Wollaſton* ſays, [Sect. 3. Prop. 4. pag. 43. in the Note (*a*)]. "The queſtion in "*Plato*, Τί ἂν τις ἔχοι τεκμήριον ἀποδεῖξαι, ἢ τις ἔρριπτο, νῦν ἥκει ἐν τῷ παρόντι, πότερον καθεύδομεν, καὶ πάντα ἃ διανοούμεθα ὀνειρώττομεν, κ. τ. λ. may have place among the *velitations* of *Philoſophers*; but a man can ſcarcely propoſe it to himſelf ſeriouſly. If he doth, "the anſwer will attend it." But, with ſubmiſſion, I think it can have no place even *diſputandi gratiâ*, without this *contradiction* in the method. For the ſuppoſing *every thing which we think* to be but a dream (though we are certain that we ourſelves, who thus dream, exiſt) is ſuppoſing *all other things* unreal, or only phantaſtical illuſions: and then we muſt ſuppoſe ourſelves left alone, ſurrounded only with our own *viſions* and *fancies*; and how a man can *velitate* with others in this ſolitary condition is hard to imagine, unleſs he make a contrary ſuppoſition, *deſtructive of the firſt*, *viz.* That other Beings *are not* unreal. And if men cannot find a handle to ſcepticize from, without making contradictory ſuppoſitions, they ſhould be ſatisfied of the abſurdity of the attempt. We cannot conceive how *truth* and *certainty* could have been more guarded than it is. Men muſt previouſly ſuppoſe a contradiction, before they can attack it. And if this be conſidered, we may juſtly wonder why the reputation of Scepticiſm ſhould be ſo great.

(*h*) In the *Cyclopædia*, the citation above begins thus: ——(Againſt the exiſtence of *Bodies* or any external *world*, Mr. *Berkley* argues very ſtrenuouſly.) ——That neither our *thoughts*, *paſſions*,

here the extent of this kind of doubting) this argument will equally ſhew ſpiritual ſubſtance to be *a contradiction in terms*, as well as matter: for we are percipient of nothing but our own perceptions and ideas, with reſpect to the *ſoul* of another man, as well as with reſpect to his *body*; or if this be true in either, it is true in both. *Activity* and *perceptivity*, the only properties whereby we infer the exiſtence of ſpiritual ſubſtance, are not that ſubſtance, but qualities belonging to it, any more than *figure*, *motion*, *&c.* are corporeal ſubſtance. If then this argument is good for any thing in the firſt caſe, it is as good in the ſecond; and if it demonſtrate matter out of exiſtence, it equally demonſtrates all ſubſtance out of exiſtence, ſave the mind thus percipient, without excepting the Deity himſelf. So that, brought to its genuine and undiſſembled iſſue, it ends in that kind of knowledge mentioned once or twice above, called *Egomiſm* (*i*). Dean *Berkley*, I think, is not far from owning this. In Sect. 138. of what he calls his *Principles*, he hath theſe words: —— "If there- "fore 'tis impoſſible that any degree of theſe powers [willing, thinking, "and perception of ideas, to wit] ſhould be repreſented in an idea or no- "tion, 'tis evident *there can be no idea or notion of a ſpirit.*" —— Here we may obſerve that, if we neither have any idea or notion of ſpiritual ſubſtance itſelf, nor of theſe properties whereby we could only come to the knowledge of ſuch a ſubſtance, (*activity* and *perceptivity*, the examples of which he aſſigns) it ſeems impoſſible that ſuch a thing could ever have entered into the thoughts of men. Theſe particulars ought to be well conſidered by thoſe who run ſo greedily into this ſcheme. It is true, *thinking*, *willing*, *&c.* cannot be painted in the imagination, as objects having figure and magnitude may: but might not this *Author* thus prove, that we can have no idea or notion of *virtue*, *juſtice*, *truth*? And if this conſequence be fair, as it ſeems to be; this ſcheme is a complication *of all the ſpecies of Scepticiſm* that have ever yet been broached. *Notion*

paſſions, nor *ideas* formed by the imagination, exiſt without the mind, he obſerves is allowed; and that the various ſenſations impreſſed on the mind, *whatever objects they may compoſe*, cannot exiſt otherwiſe than in a mind perceiving them, is not leſs evident. This appears from the meaning of the term exiſt, *&c.*——Here, that ſenſations *compoſe* their objects, wants a little proof, and is at beſt a very equivocal expreſſion.

(*i*) *Quelques Spinoſiſtes ſentant que l'evidence leur échappe à tout moment, dans les pretendues démonſtrations de leur Maître, ſont tombés dans une eſpece de Pyrrhoniſme inſenſé, nommé l'Egomiſme, où chacun ſe croit le ſeul être exiſtent.* Mr. *Ramſay*'s Diſcourſe upon Mythology, Part 1. near the end.

extends

extends not only to the images of corporeal objects in the fancy, but to whatever is the object of the underſtanding *(k)*. It is not enough that an *Author* is not explicite in owning all the abſurdities which ariſe from his ſcheme; or that he denies them: others will aſſign his authority to juſtify their maintaining them. *Epicurus* ſaid many things well —— *Cùm bene præſertim multa, ac divinitùs ipſis Immortalibus de Divis dare dicta ſuërit* —— and hath left many fine things in writing: and yet when this was obſerved to *Cicero*, who condemned his *philoſophy*, he anſwers, *Non quæro quid dicat, ſed quid convenienter rationi poſſit, & ſententiæ ſuæ dicere.*

IX. But to return. If Dean *Berkley*, to evade the inconſiſtency mentioned in N° 7. of diſputing with, and endeavouring to convince no body at all, for ought he knows, ſhould ſay that God excites the ideas of mens ſouls in him, (provided he will allow that there can be any idea, or notion, of ſouls) then all his certainty for the exiſtence of mens ſouls, is becauſe God would not excite the ideas of theſe Beings in us, to make us believe they were, unleſs they really were. And this would be founding his belief of immaterial ſubſtance, preciſely upon *the reaſon* which Dr. *Clarke* hath brought, to ſhew that we cannot poſſibly be deceived, in concluding that material ſubſtance really exiſts without the mind. That is, he cannot avoid proceeding in contradiction to himſelf, and his own tenets, without having recourſe to the force of the Doctor's demonſtration *(l)*:

(k) Des Cartes and Mr. *Locke*, take the word idea itſelf in the ſame ſenſe. Mr. *Locke* ſays, (*Introduction, ſect.* 8.) "It being that Term, which, I think, ſerves beſt to ſtand for whatſoever "is the object of the underſtanding, when a man thinks; I have uſed it to expreſs whatever is "meant by *Phantaſm*, *Notion*, *Species*, or whatever it is, which the mind can be employed "about in thinking." *Des Cartes* ſays in his geometrical method of proving the exiſtence of God, and the Soul, Defin. 2. *Ideæ nomine intelligo cujuſlibet cogitationis formam illam, per cujus immediatam perceptionem ipſius ejuſdem cogitationis conſcius ſum; adeò ut nihil poſſim verbis exprimere intelligendo id quod dico, quin ex hoc ipſo certum ſit in me eſſe ideam ejus quod verbis illis ſignificatur. Atque ita non ſolas* imagines *in phantaſiâ depictas ideas voco: imò* ipſas *hic* nullo modo voco ideas, *quatenus ſunt in phantaſiâ corporeâ, hoc eſt in parte aliquâ cerebri depictæ, ſed tantum quatenus mentem ipſam in illam cerebri partem converſum informant.* This is very diſtinct and full. Dean *Berkley*, who will not allow us to have any notion, or idea of thinking, willing, &c. ſhould give us his acceptation of the word; or ſhew us what is amiſs in Mr. *Locke* or *Des Cartes*'s acceptation. Whatever he may ſay about *abſtract ideas*, it is certain all true demonſtration is in abſtract ideas.

(l) See this Demonſtration in the *Cyclopædia*, under the word Body, immediately after Dean *Berkley*'s arguments againſt the exiſtence of matter.

and

and that demonstration overthrows his tenets. This I take to be a hard *Dilemma* upon the scheme.

X. Here we may farther observe, since Dean *Berkeley*'s argument demonstrates all substance out of existence, equally with material substance; what small reason he had to proclaim (Sect. 93. of his Book) his victory over the *Atheists* and *Scepticks*. His words are —— "Without which "[unthinking matter, to wit] your *Epicureans*, *Hobbists*, and the like, "have not even the shadow of a pretence, but become the most cheap "and easy triumph in the world."——And again, Sect. 96. "Matter be- "ing once *expelled out of nature*, drags with it so many sceptical and "impious notions, *&c.*". This is, I think, as if one should advance, that the best way for a woman to silence those, who may attack her reputation, is to turn a common prostitute. He puts us into a way of denying all things, that we may get rid of the absurdity of those who deny some things.

XI. If we will talk soberly, though the evidence of sense is not the greatest we are capable of; yet since it is the most universal and constant, fitted to all the concerns of life, and the capacities of all men; since (except in a few cases, the causes of which we know, and can rectify the judgment) there is a satisfactory agreement between the informations of it, through all different ages, and in all countries; and since it is in effect, the first foundation of all our knowledge, in our present state of union with matter; the man who endeavours to overturn *the evidence of sense universally*, endeavours to introduce the *wildest* and most *unbounded Scepticism*, let his pretences be what they will. And Dean *Berkeley*, by teaching men to distrust their senses, teaches them to distrust his *Book* in the first place; it is but an idea like other things, every word and line in it: all his actions and great undertakings are but *mere dream and chimæra*; and his designs disappoint themselves in every respect. If once we refuse that reason which Dr. *Clarke* has assigned for believing the existence of *external objects*, and a *material world*; there is in truth no stopping till a man has denied every thing that exists without his own mind, except it be perhaps the existence of some *delusory Being* who constantly cheats and imposes upon him. How this can be such an *antidote* against *Scepticism* and *Atheism* is not easy to be imagined. We might with equal reason affirm,

affirm, I think, that putting out the eyes is *the beſt cure* for dimneſs of ſight (*m*).

XII. It may not perhaps be foreign to the purpoſe, to take notice here of the contradiction in terms, which is pretended to be in aſſerting the exiſtence of matter. It is (if any where) in Sect. 4. of Dean *Berkley*'s *Principles*; for in Sect. 7. he ſpeaks of having *demonſtrated his concluſion*; and in Sect. 21. he ſays, *Arguments, à poſteriori, are unneceſſary for confirming what, if he miſtakes not, has been ſufficiently demonſtrated, à priori*; therefore in Sect. 22. he apologizes for dilating on that, which may, with the utmoſt evidence, be *demonſtrated in a line or two*, to any one that is capable of the leaſt reflection. In ſhort, all that I could find for it is in that fourth Section, and contained in the following queſtions.——" For " what are the forementioned objects [*houſes, mountains, rivers,*] but the " things we perceive by ſenſe? And what, I pray you, do we perceive, " beſides our own ideas or ſenſations? And is it not plainly repugnant, " that any of theſe, or any combination of them, ſhould exiſt unper- " ceived?"——This is but a ſorry affair to be the ſubject of three new pieces. We ſhall conſider it query by query, as it is propoſed. And firſt, *What are the forementioned objects, but the things we perceive by ſenſe?* This query ſeems not to agree well with the next. Here it is allowed that *we perceive things* by ſenſe, or by the mediation of ſenſe (for theſe things ſeem at a diſtance from the ſenſe) which are ſuppoſed, and called *objects* (of ſenſe it would ſeem); and in the next it is taken for granted, that we *perceive nothing* but our own ſenſations; that is, nothing by means of the ſenſes. This is what one may call ſlight-of-hand reaſoning. Let us join both queſtions in one. *What are the objects of our ſenſations, but thoſe very ſenſations themſelves?* This queſtion propoſed thus ſomewhat leſs jugglingly, implies or ſuppoſes the truth of this propoſition. *Our ſenſations have no objects exiſting without the mind:* which is really the whole point in controverſy. And to take this for granted, is to beg the thing to be proved; or to ſuppoſe the debate at an end. Thoſe *mountains, rivers, houſes*, we all ſuppoſe to exiſt without the mind; and although we ſhould

(*m*) It is true, *Des Cartes* doubts of the evidence of ſenſe; but it was only to ſhew it more certain afterwards; it was rather calling his knowledge to an examen; yet I humbly conceive his method was wrong; of which more immediately.

be

be wrong, it remains to prove that we are wrong, that being the whole of the diſpute. To *affirm* this, or *aſk* if it be not ſo, will never do any thing. We may farther add, ſince he allows objects perceived by ſenſe in this query, that *ſenſations* cannot be objects to themſelves: a ſenſation may become the *object* of a reflex act of the mind upon it; and it can become an object to the mind in no other manner. But when a ſenſation thus becomes the object of a poſterior perception, it is not the object to itſelf (*n*). When a man beholds the *circulation* of the blood, by the help of a microſcope, he doth not admire his own ſimple *perception*, more than when he beholds a pebble; but ſomething, which he thinks at leaſt, the *cauſe* and *object* of it. We might as well ſay, when a man laughs at ſome ridiculous thing, he laughs at his own laughter only. However, we may anſwer the queſtion categorically: That theſe *forementioned objects*, [rivers, houſes, mountains] are *the very things* we perceive by ſenſe. This is a proper enough anſwer to ſuch a queſtion: and we may add, that theſe *objects* excite ſenſations in the mind, by motion, or acting on the organs; whether by reflecting the rays of light, by raiſing an undulation in the air, by immediate contact, *&c.* and this motion is propagated by the nerves to the brain, where the ſoul (there preſent) is apprized of them thus acting. Now, it is no matter whether what we ſay be true or not; though it be only a *conjecture formed at random*, if it aſſigns to ſenſations their diſtinct objects, without a *contradiction in terms*; this puts D. *B.* to the trouble of another demonſtration, as much as if it were the real caſe that obtains.

XIII. His ſecond queſtion is, *And what, I pray you, do we perceive, beſides our own ideas and ſenſations?* A conſiſtent anſwer to this follows from what was ſaid juſt now. We perceive, beſides our ſenſations themſelves, the *objects* of them: or we perceive objects exiſting from without, by the mediation of ſenſation, or motion produced; ſince we are conſcious not only of ſenſation excited, but that it is excited by ſome cauſe beſides ourſelves; for we ſuffer it, often againſt our will. This cauſe we call matter: and D. *B.* ſays it is *God Almighty*. Hitherto there is no

(*n*) At this rate we muſt ſay, that brutes have no objects of their ſenſations, ſince ſenſations cannot be objects to themſelves; for they make no reflex acts of the mind, and there are no material objects from without, according to this ſcheme.

contradiction. He ſays it is *one thing*, and we ſay it is *another:* and ſo far he hath no reaſon to ſay we contradict ourſelves, more than we have to ſay the ſame of him: nay nor ſo much. It is pleaſant to obſerve D. *B.*'s addreſs: he would have us to allow that *matter is a ſenſation*; or that our *ſenſations* are the ſame thing with their *objects*, which being the thing in debate, is ſtill begging the argument, by an equivocal queſtion. So he might prove that, if a man in a dark night were groping out his way, with a long pole in his hand, and felt ſomething reſiſt it, which made him turn another way, leſt he ſhould run his head againſt the wall; ſo he might prove, I ſay, that it were *a contradiction* for the man to ſay, there was any thing there, beſides the pole itſelf, by *this ſame query* ——— For what, I pray you, ſays he, do you perceive, beſides the pole in your own hand?

XIV. We may here again obſerve, as in N° 8. that this query of D. *B.*'s eaſily turns againſt himſelf. We ſay, that which excites ſenſations in us is generally the objects of thoſe ſenſations, exiſting from without; unleſs in the inſtances of dreams and phrenſies, in which there ſtill is a manifeſt difference from ordinary ſenſation. He ſays, God, who is not the object of our ſenſations, is the immediate cauſe of them. How doth he diſprove what we aſſert? Thus. You perceive *nothing* but your perceptions. The *cauſe* of your perceptions, which you aſſign, is not your perceptions themſelves. Therefore you do not perceive this cauſe of your perceptions. Therefore *this cauſe of your perceptions is not at all*; or is but the ſame thing with thoſe very perceptions. Here the fundamental reaſon of this inference is, becauſe we perceive nothing but our own perceptions. But D. *B.* doth not perceive any thing but his own perceptions, more than other men: and if his not perceiving the *cauſe* of his perception, is a ſufficient ground of *denying* ſuch cauſe, or of making it the ſame thing with the very perceptions themſelves; then, God, not being perceived, either is not; or is but a very perception in the mind of man: *Abſit blaſphemia!* And thus his own argument will exterminate out of nature, any other cauſe of perception he pleaſes to pitch upon. He ſays, matter being once expelled out of nature, drags with it, *&c.* It is true, matter is but a contingent ſubſtance in nature; but being once expelled out of nature, it drags more along with it, in his method of reaſoning, than he is aware of: and it drags leaſt of all our ſceptical

and

and impious notions with it, as he pretends. To ſuppoſe it abſent multiplies theſe notions without end.

XV. The laſt queſtion in this demonſtration, and which he deſigned ſhould carry home the conviction of the whole, is, *And is it not plainly repugnant, that any of theſe* [ideas] *or any combination of them, ſhould exiſt unperceived?* Here you ſee, he preſumes you have allowed him, according to his laſt query, that *ſenſations* and their *objects* are the ſame thing; and on this preſumption, his argument indeed is concluſive: but if you are not thus far complaiſant, he is at a loſs. And I anſwer, Our *ideas* ſurely cannot exiſt without the mind: but their *objects* may; and do. And they are ſtill ſenſible objects, though they fall not under the ſenſes, at all times and in all places: *i. e.* though they are not *objected to the ſenſe*, in places where they are not; and at times when our ſenſes are not directed to the places where they are. With reſpect to this it is obſervable, that he hath another very ſhort way of demonſtrating his main point. He *ſuppoſes* that the term [to *exiſt*] hath the ſame import, when applied to corporeal things, as to be *perceived (o)*: aſſerting (ſtrongly indeed) that it is otherwiſe unintelligible. Whence it clearly follows; Matter

(o) In the *Cyclopædia, loc. citat.*——This appears from the meaning of the term *exiſt*, when applied to ſenſible things. Thus, the table I write on exiſts: *i. e.* I ſee and feel it.—— But the exiſtence of unthinking Beings, without any relation to their being perceived, is unintelligible; their *eſſe* is *percipi*.

One cannot well paſs by the argument here, without enquiring a little into the reaſonableneſs of it. This propoſition [their *eſſe* is *percipi*] is delivered with the air of an *axiom*; but if it be, it is incumbent on the *Author*, I think (who ſeems to be the firſt that diſcovered it) to ſhew the neceſſary connexion between the terms *eſſe* and *percipi*, in it. It cannot be ſaid to be *ſelf-evident*, on which account certain propoſitions were firſt called axioms; ſince others cannot find out the *ſelf-evidence*, or even the *truth* of it. We ſay indeed with reſpect to the *Deity*, his *eſſe* is *exiſtere*, becauſe *neceſſary exiſtence* belongs to his *nature*; but no body allows that *to be perceived* belongs to the *eſſe* or *nature* of matter: ſo that this axiom appears to me, after the exacteſt enquiry I am able to make, to be ſuch an *axiom* as begs the queſtion.

He argues from the meaning of the word [*exiſt*] that, when ſpoken of material things, it is the ſame as *to be perceived*; but who beſides the *Author* himſelf, hath affixed this meaning to that *term*? Is it the common acceptation of the word, when applied to material things? Hath he the *Philoſophers*, or even the *vulgar* on his ſide in this, as he ſeems to inſinuate elſewhere? *Pythagoras* aſſerted that the earth was *ſpherical*, and *habitable quite round* [——γῆν, καὶ αὐτὴν σφαιροειδῆ, καὶ περιοικεμένην· εἶναι δὲ καὶ ἀντίποδας· καὶ τὰ ἡμῖν κάτω, ἐκείνοις ἄνω. Diog. Laert.] But he did not mean that the *Antipodes* did not *exiſt* becauſe he did not *per-*

Matter which is *not perceived*, doth *not exiſt!* But the *Artificer* ſeems to underſtand that his *tools* exiſt all the intermediate time, after he lays them by at night, till he takes them up again next morning. And after this, it is unaccountable how this Author could pretend (Sect. 82.) that he doth not deny even corporeal ſubſtance, in the *vulgar ſenſe*; but only inert, ſenſeleſs matter: as if the Artificer thought his tools were *artful*, *ſenſible* matter; or diſappeared when he had them not in his hands; or even then, were nothing but the *ideas* of inſtruments in the *ideas* of his hands. All this then ends in the following *childiſh ſophiſm: Senſible things* are but the *objects* of *ſenſe*. Whenever they are not the objects of ſenſe, *they are no longer ſenſible things*. Therefore, when they are not the objects of ſenſe, or not perceived, they *are not*. But would not D. *B.* allow his houſe to be a *combuſtible thing*, unleſs it were actually on fire? He might, with equal force of reaſon prove, that unleſs it were in flame, it were *no houſe* at all.

cieve, i. e. hear and *ſee* them; as he muſt have done according to our Author's acceptation of the word. Again, *Virgil* ſays——

Eſt *in ſeceſſu longo locus: inſula portum*——

He doth not mean that the place he deſcribes did not *exiſt*, becauſe he was not there at the time to *look upon*, or *perceive* it. If it ſhould be ſaid, that *Pythagoras*, or *Virgil*, did not ſpeak *philoſophically*; we may be ſure at leaſt that they ſpoke *common ſenſe*; and as all men have ſpoke both ſince, and before. Which ſhews his ſenſe of the *term* to be quite new.

Moreover, what reaſon can be aſſigned why the exiſtence of matter ſhould be confined to *the being perceived*, more than the exiſtence of other ſubſtance? If the reaſon of the *Author*'s aſſertion be, That what is not perceived, neither *by itſelf*, nor *any other thing*, doth not exiſt, then any other ſubſtance (*the human ſoul*, v. g.) if it doth not always perceive itſelf, muſt have *intervals* of non-exiſtence, as it ceaſes to perceive itſelf, or otherwiſe: at leaſt the Author ſhould have proved that it *always thinks*, to ſhew it has no *pauſes* or *blanks* of exiſtence. It is true, it muſt always think upon his ſcheme, having no reſtraint or interruption from matter; but then he will have a difficulty to explain, how it could be ſo affected without matter, as to make this appear doubtful. I might take notice of the *variation* and *proportion* of exiſtence, (ſo to ſpeak) the *riſing* and *falling* of it, upon his ſcheme: for inſtance, The *Table* I write on, when I do not perceive it, *doth not* exiſt; but when I ſit down to write on it, *it comes again into* exiſtence. If another perſon perceives it along with me, muſt it have a *double exiſtence?* and if three of us ſit at it, muſt its exiſtence be three times greater, than if I looked at it alone? And, laſtly, if it were true that *being perceived* conſtituted the exiſtence of *matter*, and *all created ſubſtance*, the *Infinite Mind* perceives them without intermiſſion; and this will conſtitute the continued exiſtence of matter upon his own principles, I think; unleſs he would ſay that matter *exiſts continually*, as the Deity perceives it, and *doth not exiſt continually*, as other Beings do not perceive it.

2 XVI. This

XVI. This is his demonſtration. We may farther obſerve that it doth no great honour to this new ſcheme, nor thoſe who pretend to admire it, that it forces the Author to ſuſpect, that even Mathematicks may not be very ſound knowledge at the bottom. In Sect. 118. he ſays, " To " be plain, we ſuſpect the Mathematicians are no leſs deeply concerned, " than other men, in the errors ariſing from abſtract general ideas, and " the exiſtence of objects without the mind." And in Sect. 119. he ſays, the theorems in Arithmetick are *difficiles nugæ*. A man ought to have a vaſt deal of merit, and to have obliged the world with ſurpriſing diſcoveries, to juſtify his attacking theſe ſciences at this rate; or rather no merit poſſible can warrant it. And it muſt give us but a bad opinion of the notions that neceſſitate a man to declare himſelf thus. What neceſſity they lay him under, we ſhall ſee inſtantly. In Sect. 22. he expreſſes himſelf after the following manner. ——— " It is but looking into your own thoughts, and ſo trying " whether you can conceive it poſſible for a *ſound*, or a figure, or a mo- " tion, or a *colour* (*p*), to exiſt without the mind, or unperceived. This " eaſy trial may perhaps make you ſee that what you contend for is a *down-* " *right contradiction*. Inſomuch that I am content to put the whole upon " this iſſue; if you can but conceive it poſſible for any one extended, " moveable ſubſtance, or in general for any one *idea*, [here *extended moveable ſubſtance*, and idea, are ſuppoſed *ſpecies* and *genus*; in which caſe he is very ſafe] " or any thing like an idea, to exiſt any other ways, " than in a mind perceiving it, I ſhall readily give up the cauſe. And " as for all the *compages* of external bodies you contend for, I ſhall grant " you its exiſtence; though you can neither give me any reaſon why you " believe it exiſts, nor aſſign any uſe for it, when it is ſuppoſed to exiſt. " I ſay the *bare poſſibility* of your opinion's being true, ſhall paſs for an " argument that it is ſo." ——— This is very ſolemn! A man that is ſo generous had need be wonderfully ſecure of his concluſion.

(*p*) D. *B.* hath perplexed himſelf about the *ſenſible qualities* of bodies; and inſiſts much upon it as a demonſtration of the non-exiſtence of matter, becauſe theſe qualities cannot exiſt without the mind. But he might have obſerved *that heat*, for inſtance, is an *equivocal word*; and may either ſtand for the *ſenſation* excited in the mind, or the *quality* in external bodies, raiſing that ſenſation. It is very trifling, becauſe the *firſt* cannot exiſt without the mind, to infer that the *laſt* cannot; to conclude, that becauſe *ſenſation* is not in the fire, there is no *quality* in it to raiſe ſenſation in a ſenſitive Being. Here *figure* and *motion*, are nicely ſhuffled in with *colour* and *ſound*; though they are qualities of a different kind.

XVII. But

XVII. But we take him at his word. Having ſhewn that his demonſtration doth not conclude; and conceiving it very poſſible that the whole *compages* of external bodies may exiſt without the mind, and no ways in it; the argument is at end with him *(q)*. No man can ever be ſeriouſly perſuaded, that this Author's ſcheme is true in fact, let him uſe the utmoſt violence poſſible to his reaſon. The thing itſelf is of ſuch a nature, that it will not admit of belief: ſo far is the contrary from being a *downright contradiction*, as he ſays. And it is wonderful that he ſhould be ſo peremptory in direct oppoſition to the ſenſe of mankind. However, we ſhall go on to ſhew, in conſequence of what was ſaid in N° 6. how poſſible matter is; and that there is all the evidence for the real exiſtence of it, that the nature of things can admit of, unleſs we will require the contradiction there named to be proved. And firſt, if matter had not been poſſible at leaſt, no man would ever have had any idea of it at all. To omit the reaſon of this before given, (N° 6.) let us conſider that whatever part of an idea is not perceived, is *no part* of it; its *eſſe* is really *percipi*. (See D. *B.*'s *Principles*, Sect. 132. as alſo his *Opticks.*) A part of a perception not perceived, is a contradiction indeed, being a part of it that is *no part* of it. Conſequently a part leſs than the *minimum ſenſibile* (ſee again Sect. 127.) is no part of it, or nothing. Therefore *in the idea* of a ſolid inch of matter, *v. g.* there is no part that might be expreſſed by this number 1,000,000,000,000 in the denominator, having unite for its numerator, (or we may make the number greater, for thoſe who have very good eyes) ſuch a part being leſs than the *minimum ſenſibile:* or ſuch a part is nothing at all. But if there be no ſuch part; or if the million-millionth part is preciſely nothing; the *whole idea* is made up of a million of million of *no ideas:* or the whole idea is no idea. For undoubtedly, a million or any number of nothings, will never make ſomething: nor will any number *of negations* of an idea, ever make a *real idea*. Two, ten, a hundred, *&c. negations* of a thing, will never amount to the *thing itſelf*. Thus unleſs a *real, ſolid, figured ſubſtance*, were at leaſt poſſible to exiſt without the mind, ſuch a part of which would be a real part, of the ſame nature with the whole; our idea of the whole would

(q) It is to no purpoſe to inſiſt longer on any thing contained in his Book. It will all be found to be a repetition of this ſuppoſed Demonſtration. He carps very much in his Introduction at abſtract ideas; but the uſefulneſs and neceſſity of them is never a whit the leſs; a remarkable enough inſtance of which will appear immediately.

be *impoſſible*, and *no idea*. This follows from aſſerting ſuch a ſcheme, as makes it neceſſary to maintain, that *whatever we perceive not of matter is not*, which this Author doth very explicitely (*r*). A little *abſtraction of ideas*, to which he is ſuch an enemy, would have been of uſe to him here. The ſame may be ſhewn concerning the ideas of *motion*, reſiſtance, weight, *&c.* We do not perceive the reſiſtance of an atom; therefore we could not perceive that of a cannon-ball: for the laſt is but ſo many times the firſt. And if the firſt be nothing, ſo many times *no perception* will never make perception. Again, we have no ſenſe of a motion extremely ſlow, or extremely ſwift: therefore ſuch motions are not. We have no perception of the motion of the index or hour-hand of a clock: and yet this *no perception*, ſo many times repeated, becomes real perception, with reſpect to the minute-hand (*s*).

XVIII. Again,

(*r*) Here we might aſk a reaſon from the Abettors of this ſcheme, why our ideas do not reach the very intimate Eſſence of other things, as well as body! Our ideas come not up to thoſe in the Divine Mind, with reſpect to body, more than other things.

(*s*) We may draw it as a corollary from the argument in this paragraph, That our perceptions in general *have no parts*, or are indiviſible; and *particularly* that our ideas or perceptions of diviſible, extended ſubſtance, are themſelves *indiviſible*, without *parts* or *extenſion*. If they were not, then the million-millionth part of the perception of an inch long, would be *ſome part* of it, or *perceived* by the terms. And from this again it will follow, that the percipient Being in us *is not matter*; becauſe if our perceptions of length, breadth, figure, were in a material ſubſtance, they *ſhould* neceſſarily have dimenſions. For ſuch ideas of figures would be then affections, or modifications of matter; but all affections or modifications of matter, muſt be inherent in the matter whoſe modifications they are. And if the perception or idea of a figure, be an *inherent modification*, or *affection of matter*; it is clear *it muſt inhere in all the matter percipient of it*, and therefore have equal ſuperficial dimenſions at leaſt. And, ſecondly, Our perceptions of extenſion being without parts illuſtrates, and confirms what was ſaid in Sect. 3. *viz.* That the ſoul hath no parts, or is a *ſimple, indiviſible ſubſtance*. We muſt ſay, I think, that *all the ſoul is percipient*: if any part of it were impercipient that would not have the nature of *ſoul* (or of percipient Being). And if all the ſoul be percipient, and yet its perceptions *be without parts*, we muſt ſay that *it hath no parts*. If the ſoul were extended as matter is, certainly our perceptions would be extended, or have parts; *infinite diviſibility of extenſion* would not only be conceived by abſtract reaſon, but the actual infinitely little parts would be *pictured down*, if I may ſo expreſs it; or they would be *as much perceived*, as any parts, and that by the terms being *parts of the perception*. And, laſtly, from this corollary I aſk the following queſtion: If the faculty of imagination requires a *picture extended in length and breadth*, but no idea or perception, *as it is in the mind*, is extended, Does not the power of imagination as much infer a material ſenſory or organ, as a pure or ſimple perception requires an unextended or immaterial percipient? In imagination, or in ſenſation of viſible objects, the perception *is not itſelf a picture*; but undoubtedly *it is the perception*

of

XVIII. Again, *ſolidity*, *figure*, *diviſibility*, *&c.* are either properties inhering in ſome ſubſtance; or ſubſtance itſelf (*that thing*, to wit, in which properties inhere, which we call, and muſt call ſubſtance:) if they are ſubſtance, *ſolidity* and *figure* will prove a *ſolid*, *figured* ſubſtance upon us. If they are only properties, they are either properties of our ideas, or not; if they are, then our ideas *are ſubſtance*, with reſpect to theſe *properties*, or the thing in which they inhere; and therefore ſolid, figured ſubſtances. A thing that hath ſolidity, figure, *&c.* as properties belonging to it, or predicable concerning it, muſt be *a ſolid*, *figured thing*. But that our ideas ſhould be ſuch, as upon this ſcheme they muſt be, is monſtrous. At leaſt therefore, a ſubſtance muſt be poſſible, of which theſe are properties: for they are certainly properties of ſomething. And if it be allowed that ſuch properties exiſt now; or that the thing exiſts to which they belong; they will infer not only the *poſſibility*, but the *actual exiſtence* of matter.

XIX. Again, all geometry is converſant about *quantity*. If there be nothing that can be called *quantum* in nature, or without the mind; nothing to which *quantity is applicable*; then we have a large body of fine demonſtration, and men have diſcovered vaſt numbers of *eternal* and *undeniable properties* (as of a *triangle*, *circle*; *cylinder*, *ſphere*) preciſely of nothing; *immutable truths* converſant about an *impoſſible object*: which is ſtrangely contradictory. It hath been always allowed that *nothing* can have no properties predicable about it, nor truths demonſtrable concerning it. Our ideas are not *quantity*: to ſay that would be to deny again the principal hypotheſis maintained in this ſcheme *of an utter want of extenſion* in rerum natura. And if we allow *extenſion*, why not *an extended ſubſtance?* They are only ideas of quantity: and thoſe truths are purely demonſtrable of the *objects* of our ideas. No man ever ſpake of a *circular*

of a picture ſomewhere lodged. And if this be ſo; imagination, as it is the perception of a picture, ſhews not only that the ſoul is immaterial, *but that it is united to a material ſenſory*, where the picture is impreſſed, and to which it applies for the perception of it; or that matter exiſts. How far this argument is applicable to overturn D. *B.*'s ſcheme, the Intelligent will determine; but *Cartes* himſelf, who, it may be preſumed, ſhewed D. *B.* the way of calling material ſubſtance in queſtion, ſays——— *Nam attentiùs conſideranti quidnam ſit imaginatio, nihil aliud eſſe apparet quàm quædam applicatio facultatis cognoſcitivæ ad corpus ipſi intimè præſens* [the ſenſory] *ac proinde exiſtens*. Meditat. 6.

thought;

thought; a *ſpherical*, or *triangular perception*: the *ſine* or *tangent* of a *ſenſation* would be a new monſter in ſcience. Where will theſe abſurdities end? Nothing ever expoſed men ſo much as this late ſpecies of Scepticiſm. It is a wonder it ſhould find admirers; and among Mathematicians! For upon this ſcheme the object of their whole ſcience is unphiloſophically univerſal and abſtract.

XX. Moreover, What a fine branch of knowledge have we concerning *extended* and *reſiſting quantity*, or body? The *ſhock* of bodies againſt each other, particularly of *elaſtick bodies*; their perpendicular and inclined *deſcents*; their *motion*, circular, or in other curves; their *centrifugal forces*; their *centers* of gravity, oſcillation or percuſſion? What fine and ſurpriſing theorems, concerning bodies moving in, or ſupported by *fluids*? Theſe truths have ſtill nothing for their object. Our ideas are not *heavy*, *reſiſting*, *projectile*, *fluid*; capable of being *compreſſed*, or *dilated*; have no properties of *inflexion*, *refraction*, *&c.* To allow that our ideas had any of theſe properties, would be to allow them to be ſolid, reſiſting, figured, diviſible *things*. And to ſay it is impoſſible there can be any *ſubſtance* of which theſe are properties; or to doubt only of this; is to doubt if ſeveral uſeful truths may not be found out, and demonſtrations given, about *nothing*. Let me ask, What kind of philoſophy would ſuch propoſitions as theſe make; the *centrifugal forces* of two *equal ideas*, revolving in the ſame time, in unequal ideas, are as their diſtances from the *centers* of theſe *ideas*? Or, the *volumes* of *compreſſed* ideas, are reciprocally as the *weights* of the *ſuperincumbent* ideas? Or, the ſpaces run over by an *idea*, falling by its own *gravity*, are as the ſquares of the times? This would ſtill run more odly if dreſſed entirely in the language of this hypotheſis, thus: The *ideas* of the ſpaces *run over* by an *idea*, falling by the *idea* of its own gravity, are as the *ideas* of the ſquares of the *ideas* of the times: for here all muſt be expreſſed by *idea*, their objects being impoſſible. Theſe are ſhocking to the laſt degree. It is no wonder that the men who broach this ſcheme, ſhould bear a grudge to Mathematicks. They are diametrically oppoſite to each other: and if there be any truth in that ſcience, this muſt fall. Or rather we may ask univerſally, the particulars in N° 8. and 14. being alſo taken into conſideration, what philoſophy theſe men would retain; or what kind of knowledge would they leave to be purſued? Indeed what throws us into general and unbounded Scepticiſm, muſt ſtrike at the roots of all ſcience.

XXI. But it will be ſaid, could not *God Almighty* have excited all theſe ideas in ſeparate ſpirits, and made them capable to inveſtigate theſe properties of a ſolid, extended ſubſtance, which never actually exiſted? To this it is anſwered, that indeed *theſe truths* concerning a *ſolid, extended ſubſtance*, were eternally in the *Divine Intellect*, before ſuch ſubſtance exiſted: but then ſurely they were truths only, with regard to that *ſubſtance* itſelf, and not with reſpect to *immaterial ſubſtance*; unleſs we ſhould ſay that the real properties of matter, were applicable to, and true concerning a ſubſtance *not matter*. Thus, even Infinite Power could not prompt us with theſe ideas in reſpect of any thing but what we believe to be the *objects* of them, not of our ideas themſelves. *Which, by the way, realizes our knowledge and philoſophy about material things more than it is of late faſhionable to allow (t).*

XXII. This being ſo; the next queſtion is, Whether God Almighty (*a Being of infinite veracity*) would have made it neceſſary for all thoſe ſeparate ſpirits (whom we call *men*) to purſue and attain a knowledge, leſs or more, or at leaſt an experience, of the nature of a *ſubſtance* which no way exiſted, as fancying that a great part of their eaſe and comfort depended upon *this*; and have ſo conſtituted them, that all of this ſpecies of Beings in the world, not excepting one, are verily perſuaded, that they are continually converſant with this ſubſtance, and that it enters into their compoſition: the *queſtion* is, I ſay, Whether this Being could have performed ſuch a conſtant and univerſal *piece of juggling (u)?* If it could anſwer a good and wiſe end, that this ſubſtance ſhould exiſt; *why doth it not*

(t) I beg that the following axiom of *Des Cartes* may be conſidered in this view, and it ſeems to me nothing needs be more evident. Axiom. 5. *Unde etiam ſequitur realitatem objectivam idearum noſtrarum requirere cauſam, in quâ eadem ipſa realitas non tantum objectivè, ſed formaliter vel eminenter contineatur. Notandumque hoc axioma tam neceſſariò eſſe admittendum, ut ab ipſo uno omnium rerum tam ſenſibilium, quàm inſenſibilium cognitio dependeat.*

(u) It is extremely abſurd to ſuppoſe that God Almighty ſhould have given us ſo coſtly an *apparatus* of ſenſes, as *Anatomy* diſcovers ours to be, eſpecially of *ſeeing* and *hearing*; made us capable of inveſtigating the nature and method of ſenſation; of ſeeing the contrivance and wiſdom, and the relation between the *object* and the *faculty*; and all deſigned only to miſguide and deceive us, as if theſe were to be the organs for communicating the action of external objects, when in truth there is no ſuch thing. This in the language of the preſent ſcepticiſm is, That God *excites* in us (or rather leaves us to *inveſtigate*) certain wonderful ideas [of *eyes* and *ears*] for the reception of other ideas, [*men, houſes, animals, &c*] which we are incapable of receiving

not exiſt? If otherwiſe; *why make us believe a thing exiſts*, whoſe real exiſtence could have anſwered no good and wiſe end? Can any ſuppoſition lay God under a neceſſity of conſtantly deceiving his creatures? and his rational creatures too? Will not ſuch a ſuppoſition contradict his reaſon and his truth? This will have all the force of a juſt demonſtration to ſober men. Beſides, ſince no man can be certain of the exiſtence of other men, upon this ſcheme; and ſince it is ſaid that God excites in us all the ideas, which we fancy are excited by bodies; we muſt ſay that, when we think we are tempted by other men, to commit an *unjuſt* or *immoral* action, God immediately tempts us: and this, not only by exciting the ideas of the perſuaſives in the temptation (of the words and actions, to wit, which are nothing external;) but in formally *contriving*, and *ſuggeſting* the *obliquity* of the ſin we are tempted to; for, as hath been ſaid, taking away the exiſtence of their bodies, there is no kind of evidence left for the exiſtence of the ſouls of men, who by the *abuſe* of their *freedom* might tempt us. They who allow God to be a *Deceiver* as to the firſt, can make no ſcruple of ſuppoſing him to impoſe on us in the laſt. I might mention the influence of this *new refinement* on the lives and practices of men. Though the obliquity of actions riſes from the will; he who thinks *theft*, *murder*, or *adultery*, nothing real beyond bare idea, and that for ought he knows, he injures *no body*, will be ſurely under leſs reſtraint to ſatisfy his inclinations of any kind. I might alſo mention the direct tendency of this improvement to *Atheiſm*. Men will hardly allow the exciting illuſory ideas in our minds, of *beauty* and *order*, which no where really exiſt, ſuch a proof of the power and wiſdom of God, as an actually exiſting frame of material nature, where the *grandeur*, *harmony*, and *proportion* is permanent and real, exiſting from without, as well when we turn our thoughts *from*, as *to it*. And indeed it is not; for take away the exiſtence of the material Univerſe, and all the ſurpriſing ſcene of Providence diſcovered above, Sect. 2. where the God of nature by *real power exerted*,

receiving by the ordinary manner, if theſe firſt ideas are any way diſordered. And all the art and experience men have acquired, to procure themſelves eaſe and relief from ſuch diſorders, is only at the bottom helping an *idea* that is *diſtempered*; a mere juggle (as I ſaid) played upon us by the Author of our nature. Let me ſuppoſe that the Deity himſelf poſſeſſed us with a notion, that our bodies were made of *China-ware* or *Glaſs*, (*vel caput habere fictile, vel totos eſſe cucurbitas, vel ex vitro conflatos*, as *Cartes* ſays) and then aſk, If that would be a greater impoſture, than the preſent, on our Author's ſcheme?

conſtantly preſerves the world, and influences every *particle* and *atom* of this ſubſtance, by inceſſant, various, wonderful *impulſe*, ends in a dream and chimera. In that caſe no power could be exerted but to delude us. How could we believe the abilities of a Being, who was forced to have recourſe to a deceit, to raiſe in us a notion of them? Or what opinion muſt we have of his wiſdom and addreſs, when we ourſelves can detect the impoſture? How much better is it as otherwiſe ordered! We cannot *convince God of a lye*; nor ſhall we be able *in an after-ſtate* to ſay, he deceived us *in this*. What a noble ſchool is the frame of nature, where we ſee the Creator's mighty power put forth, in conſtantly moving and regularly directing, the vaſt, unwieldy bulks of dead matter; where all the works are real, nothing phantaſtical! How would it grieve a rational mind to think that all this was performed in ſhew only; and our ignorance laid hold on to raiſe our amazement! Doth it not appear that the good and wiſe end deſigned, and in ſome meaſure attained by the real exiſtence of the material world, is to train us *rational Beings* up to the knowledge of the perfections of the Deity, in a way adapted to our nature and capacities?

XXIII. Now to return to where we began. Matter is *poſſible*, as hath been ſhewn juſt before; but not *neceſſary*, as hath been alſo ſhewn: What kind of evidence, or demonſtration then, would we have for the exiſtence of ſuch a ſubſtance, which we have not? In reaſon and philoſophy, its exiſtence ſhould be known from the *effects* it produces, or the *perceptions* it excites in us, and the *perfections* of that Being, who conſtituted it and our nature ſuch, that it ſhould act, and we perceive it acting. To expect we ſhould know it *without ſenſation*, is to demand a proof of its exiſtence, inconſiſtent with the very idea we have of it. To inſiſt that its exiſtence ſhould be inveſtigable by abſtract notions, tho' we get our ideas originally from ſenſe, by which matter muſt firſt enter, is to ſhew a great *unskilfulneſs* (*v*), or a *fixed reſolution* to doubt; it is to ſuppoſe it a *neceſſary*, and not a *contingent* Being. Its exiſtence hath no eternal neceſſary properties belonging to it; nor the exiſtence of any thing ſave the Deity. Therefore I conclude, that the knowledge of the exiſtence of external ma-

(*v*) Mr. *Ramſay* obſerves well, *La ſource du Pyrrhoniſme vient de ce que l'on ne diſtingue pas entre une démonſtration, une preuve, & une probabilité. Une démonſtration ſuppoſe l'idée contradictoire impoſſible; une preuve de fait eſt, où toutes les raiſons portent à croire, ſans qu'il y ait aucun prétexte de douter; une probabilité eſt, où les raiſons de croire, ſont plus fortes, que celles de douter.* Travels of *Cyrus*, Book 6. in the Diſpute between *Pythagoras* and *Anaximander*.

terial objects, by ſenſe, is *certain knowledge*, and the evidence as great, as poſſibility, and the nature of things can admit of; and therefore, as great as the reaſonable ſoul (as ſuch) can deſire (*x*).

XXIV. Before we put an end to this Section, it will not be amiſs, in conſequence of what has been ſaid N° 1. to take ſome farther notice of the ridiculous cauſe that hath raiſed all this doubting concerning the *exiſtence of the material world*, and carried ſome to deny directly the poſſibility of any ſuch thing; *viz. That we have no certain mark to know whether we are awake or aſleep.* This is what a man of plain, common ſenſe would laugh at: only *Philoſophers* think it enough to prove the world may be *nothing* rather than *ſomething*. In an objection made to *Des Cartes* concerning his doubting, the *Objector* readily grants, There is no mark to know which of the ſtates we are in, and only finds fault with *Cartes* for publiſhing, as a new method of doubting, that which *Plato* and *others* had broached

(*x*) Mr. *Locke* ſays, (Book 4. chap. 2. ſect. 14) "So that, I think, we may add to the "two former ſorts of knowledge, this alſo, of the exiſtence of particular external objects, by "that *perception* and *conſciouſneſs* we have of the actual entrance of ideas from them; and allow "theſe three degrees of knowledge, *viz. Intuitive*, *Demonſtrative*, and *Senſitive*; in each of "which there are different degrees and ways of evidence and certainty." See alſo chap. xi. of the ſame Book. Mr. *Ramſay* in the place juſt now cited, ſays, ——*Je crois qu'il y a des corps, non ſur le témoignage d'un ſeul, ni de pluſieurs ſens, mais ſur le conſentement unanime de tous les ſens, dans tous les hommes, dans tous les temps, & dans tous les lieux. Or comme les idées univerſelles & immuables nous tiennent lieu de démonſtrations dans les ſciences, de même l'uniformité continuelle, & la liaiſon conſtante de nos ſentiments, nous tiennent lieu de preuves, lorſqu'il s'agit de faits.*——After this let me obſerve, ſince this ſcheme denies the exiſtence of matter, *contrary to the teſtimony of ſenſe*; and ſince the Epicurean ſcheme allows of nothing but matter, *from the teſtimony of ſenſe*, ſetting the certainty of ſenſe above that of reaſon, (ſee *Lucr.* lib. 1. ver. 420. & *ſeq*) let me obſerve, I ſay, that it is not eaſy to conceive, how theſe two ſhould agree in this particular of the teſtimony of ſenſe; though it is obſerved in the *Cyclopædia*, under the word [*fallacy*] they do.——Laſtly, (ſays the Author) "*Reaſon* cannot ſhew our *ſenſes* "miſtaken, ſince all reaſoning depends on previous ſenſations; and the ſenſes muſt firſt be true, "before any reaſoning founded thereon, be ſo. Thus the Epicureans; whoſe ſyſtem is ſtrongly "confirmed, by what we have already laid down from D. *B.* concerning the external world." Theſe two ſeem to me to agree in nothing, unleſs in perverting all true philoſophy——Yet (ſays the ſame Author, under the word Abſtraction) has a *late eminent* and *ingenious Author* D. *B.* conteſted the reality of any ſuch ideas [*viz.* abſtract] and gone a good way towards overturning the whole ſyſtem, and conſequently towards ſetting our philoſophy on a new footing.

long

long before him (*y*): which, by the way, is a ſtrange ſort of an objection. The inconſiſtency of this *doubt*, or this queſtion, is plain, I think, in that no man has a right to make it, but he who hath experience of both the different ſtates. If he has only been in one of them, he can know *no difference*, and therefore be in *no doubt*: and if he has been in both, and remembers a difference, he muſt know it; and therefore is obliged to anſwer himſelf, as having a conſcious experience of the thing he deſires to be informed in. Since ſleep is a ſtate in which the faculties of the ſoul are obſtructed, or impeded, by the indiſpoſition of the matter of the body, eſpecially memory; ſince this is ſo, I ſay: for a waking man to deſire a *mark* or *ſign*, whereby to know if he be awake, is as if he ſhould deſire another man to tell him, *Whether he hath the powers of his ſoul at liberty or not?* which he himſelf can know beſt. The ſoul hath not ſome powers to be impeded, and *other powers* of the ſame kind to remain ſtill free; it ſhould then have *two conſciouſneſſes*; therefore it is improper to ask, if a ſleeping man can have a mark to know whether he ſleeps? nor is it leſs improper for a waking man to ask a mark to know if he be awake. In the *firſt caſe*, there is a want of conſciouſneſs of the ſtate we are in; and in the *ſecond*, a conſciouſneſs that we are not in the *firſt ſtate*: what doubt can there then remain here? If the powers of the ſoul were not impeded in ſleep, that ſtate would not differ from being awake, except in the indiſpoſition of the body: but ſince it differs ſo widely otherwiſe, who can be excuſable in pretending not to know the difference? At this rate, men might ask a ſign to know, whether they are blind, or not, or how they can be certain that they are in their ſober ſenſes, rather than mad (*z*); and whether, when they are conſcious of a thing, they can be ſure that they are conſcious of it (*a*).

XXV. Thus

(*y*) *Satis conſtat ex iis quæ dicta ſunt in hac Meditatione* [*prima ſcil.*] *nullum eſſe* κριτήριον, *quo ſomnia noſtra à vigiliâ, & ſenſione verâ dignoſcantur;* ——— *veritatem hujus meditationis agnoſcimus. Sed quoniam de eâdem incertitudine ſenſibilium diſputavit* Plato, *&c.*

(*z*) *Pyrrho* indeed, and the *Scepticks*, ſeem to deny a difference between *theſe two.* ——— ἐδὲ γὰρ οἱ μαινόμενοι παρὰ φύσιν ἔχουσι. Τί γὰρ μᾶλλον ἐκεῖνοι ἢ ἡμεῖς; but to defend this, was, I think, *to own themſelves mad* in effect.

(*a*) The argument in this paragraph, which is ſaid not to be intelligible enough, would perhaps become plainer, if we ſhould aſk the queſtion, Whether it is a *waking man*, or a *ſleeping man*, who propoſes the doubt? And to this we may reaſonably expect an anſwer, ſince the *doubt* ſuppoſes a *difference* of the two ſtates, and that this difference *hath been obſerved*; for otherwiſe the *ground* of doubting vaniſhes. It may, I think, be probably ſuppoſed that

XXV. Thus much of the different *ſtate* of the mind itſelf in theſe two conditions, of ſleeping and waking, which brings the τεκμήριον ſought to *ſelf-conſciouſneſs.* But the great difficulty pretended, is, *How can we be ſure that any thing exiſts?* All from N° 1 to 24. is an anſwer to this; to which let me add, that, if we never dreamed in ſleep, we ſhould not at all doubt of the *exiſtence* of the frame of nature. But have we leſs evidence now, than if all were a *blank* then? Or can the exiſtence of the world depend upon the indiſpoſition of our bodies, or the different ſtate of conſciouſneſs of our minds? Suppoſe a *whole nation* of men ſhould never dream, (ſee N° 33. Note (*c*) of the laſt) and *another nation* never ſleep, while *we* both ſleep and have viſions in our ſleep; can the *ſtanding* or *falling* of the fabrick of the univerſe *depend* upon *this diverſity?* We ſee the heavens repreſented in a *pool* of ſtanding water, and images reflected from a *mirrour:* is that *heaven*, or the images of theſe objects leſs real, becauſe the ſtars are made appear *below* the ground; or men, trees, houſes, repreſented

Plato, and *Cartes* were awake, when they propoſed this *nice* and *philoſophical* manner of doubting; and that they ſtarted it from ſome experience of the two different ſtates, otherwiſe they would ſtill have doubted without reaſon; and yet that *very experience* anſwers the doubt. The *doubt* could never be greater than the *experience* on which it was founded: If this experience is ſuppoſed *nothing*, the doubt becomes *nothing* at the ſame time; and the *greater* the experience is ſuppoſed to be, the doubt becomes the *leſs*; ſince much experience of the *difference* could beſt teach them that *difference*. This, I preſume, makes the argument intelligible; and ſhews the *inconſiſtency* of ſuch doubting, if a man allows himſelf to be awake. And if he ſays *he dreams when he doubts thus*, what he owns here alſo anſwers itſelf; when he awakes, he will find it but a dream. Beſides, he owns the *difference* between dreaming and not dreaming, and the former argument will ſtill be applicable.

But allowing the *Scepticiſm* to be puſhed as far as may be. If one ſhould ſay, "I never dreamed "in my life." (Since ſome of *theſe men* affirm this of themſelves) what reaſon would he have for aſking a κριτήριον, whereby to diſtinguiſh *dreaming* from *not dreaming*, when he owns he never dreamt in all his life? And if he ſhould ſay, "I had ſuch a dream laſt night, and "was verily perſuaded of the *real exiſtence* of the things ſeen; and why may not the things "I ſee and hear now be as phantaſtical as theſe were?" I anſwer, firſt, he is incapable of being ſatisfied; becauſe, on his own principles, he will ſtill have equal reaſon to think any anſwer as phantaſtical as the *perſon* [or rather φάντασμα, according to him] who gives him the anſwer: and therefore, as I ſaid in the beginning of the Section, he ſhould for ever hold his tongue, and doubt on in ſilence. When he deſires ſatisfaction, he ſuppoſes the *reality* of the thing he pretends to *doubt of*. This is always the fate of *Scepticiſm*. And, ſecondly, when he ſays, "He dreamed laſt night, &c." He owns he is awakened out of *that dream* now, otherwiſe he could not perceive that it was but a dream: Or elſe he muſt allow he is ſtill

preſented as hanging *above us?* What if ſome idle Philoſopher had made this a handle to become a learned Doubter? Though perhaps we might have had another Denomination of Scepticks from this man; that would not however have made the exiſtence of heaven and earth leſs certain. This may be thought a ſtrange ſuppoſition; and yet the *Scepticks* pretended to doubt of the *exiſtence of material objects* on this very account; *viz.* from the *different appearances* they made by mirrours. ——— ἡ δ' αὐτὴ δὲ μορφὴ φησὶ τὰς διαφορὰς τῶν κατόπτρων ἀλλοῖα θεωρεῖται· ἀκολούθει οὖν μὴ μᾶλλον εἶναι τοῖον τὸ φαινόμενον, ἢ ἀλλοῖον. Diog. Laert. Pyrrho. And as this very phænomenon of exhibiting the appearances of things by the *pool*, or the *glaſs*, ſuppoſes and proceeds from the *reality* of external objects exiſting: ſo even our dreams, though they have no external real objects, yet *ſuppoſe ſuch*, and are exhibited in imitation of them; and upon this account deceive us. Therefore, rightly conſidered, they bring no argument againſt the real exiſtence of material things, but rather one for it. Thus *Cartes* himſelf ſays (though againſt his own purpoſe) in the ſame place where he propoſes his *univerſal doubting*, ——— *Tamen profectò fatendum eſt viſa per*

ſtill dreaming on; and, as I ſaid, whatever anſwer is made to him muſt ſtill appear a dream. If he ſhould ſay, "I am not certain whether I ever dreamed in my life, or not." It is as if he ſhould ſay, "I am not certain, that ever I was in a different ſtate of conſci-"ouſneſs from what I am in at preſent." And then why ſhould he demand a κριτήριον or mark to know which of the two ſtates he is in, who never obſerved any difference? He can have no doubt of the *reality* of external objects, who was never impoſed on, by being made to think *phantaſtical* objects real. And how could any anſwer give ſatisfaction to ſuch a man? If he thinks all things real, he will need no ſatisfaction; and if he thinks them *phantaſtical*, the anſwer muſt appear to be *ſuch*, as much as all other things. In a word, he hath either perceived a difference of the ſtate of conſciouſneſs he hath been in; or he hath not: if he hath not, he can have no doubt; and if he hath obſerved a *difference*, he ſhould conſider that difference, and is obliged to anſwer himſelf, as having a *conſcious experience* of the thing he deſires to be informed of. For it is *mere humour*, and in effect *abſurdity*, for a man to ſay, "Inform me of a particular, of which I have experience in my own conſciouſneſs, from "your experience of it in *yours*; ſince *ſelf-conſciouſneſs* of what paſſes in one's own mind, is the *laſt appeal* in all controverſy.

From all this, it appears ſtill more plain, I think, that *Scepticiſm*, in any ſhape that may be given it, is inconſiſtent with itſelf, in ſuppoſing the thing concerning which it pretends to doubt; and therefore it defeats its own deſign every way. Whence it muſt appear a very *extraordinary attempt* to endeavour to raiſe doubts, in ſpite of the *abſurdities* that attend doubting, and to render *truth* ſuſpected without any ground. Though I were able to perplex *plain* and *well meaning* men, by this ſubtil kind of doubting; I muſt be conſcious to my ſelf of a diſingenuity and perverſeneſs in the *undertaking*; unleſs I alſo ſhewed them a way how to get free of ſuch *puzzling ſophiſtry*.

quietem

quietem eſſe veluti pictas quaſdam imagines, quæ non niſi ad ſimilitudinem rerum verarum fingi potuerunt——— This is remarkable in itſelf; but ſtill more ſo as ſaid by *him*, and on ſuch an occaſion too. He continues—— *Ideoque ſaltem generalia hæc, oculos, caput, manus, totúmque corpus, res quaſdam non imaginarias, ſed veras exiſtere: nam ſanè pictores ipſi, ne tum quidem, cùm ſirenas & ſatyriſcos maximè inuſitatis formis fingere ſtudent, naturas omni ex parte novas iis poſſunt aſſignare, ſed tantummodo diverſorum animalium membra permiſcent; vel forte*——— In our dreams we have repreſentations of ſome things that cannot be imaginary, as *figure*, *magnitude*, *number*; and of ſome that are neceſſary, as *time*, *place*: every viſion muſt have *duration*, and a *ſcene* of exiſtence. So *Cartes* in the ſame place—— *cujus generis eſſe videntur natura corporea in communi, ejuſque extenſio; item figura rerum extenſarum, item quantitas, ſive earundem magnitudo, & numerus: item locus in quo exiſtant, tempúſque per quod durent*——(*Meditatio* 1.) From this the *Intelligent* will ſee that dreams are but ſuperficially conſidered, when they are made a *pretence for doubting*; and that *Cartes* himſelf cuts off the chief pretence he had for calling in queſtion his former knowledge; though with the deſign of becoming more certain, and placing it on a ſurer foundation than it formerly was.

XXVI. Let me here obſerve to young people, who have not perhaps conſidered it before, that this *great Man* was not able with his utmoſt effort ſeriouſly to *doubt of every thing*. Having alledged all the reaſons for doubting in his *firſt Meditation*, that he could think of; he is forced at length to come this, *That if he could not doubt on other terms, he would deſignedly deceive himſelf by doubting*. His words are, *Quapropter, ut opinor, non malè agam, ſi voluntate plane in contrarium versâ*, meipſum fallam, *illáſque omnino falſas imaginariáſque* fingam, *donec tandem velut æquatis utrimque præjudiciorum ponderibus, nulla ampliùs prava conſuetudo judicium meum à rectâ rerum perceptione detorqueat.* As if he had ſaid, "If I cannot doubt "with my eyes open, let me ſhut them: if I cannot believe things falſe, "let me ſuppoſe them falſe againſt my belief". Is it not plain here, he only ſaid he doubted, without being able to do ſo? Thoſe things could not be called prejudices, with which he was forced to take this method. A man ſhould not doubt, where he is forced to feign cauſes of doubting (*b*). And in the *Synopſis* of his *Meditations*, he ſays, (ſpeaking

(*b*) If any one *doubts* that he may *become more certain*, and is forced to feign cauſes (nay to deceive himſelf) that he may *doubt*; I ask if he can *become more certain* by this method

ing of the external world, the bodies of men, and other things of that nature) *De quibus nemo unquam ſanæ mentis ſeriò dubitavit.* The other great reaſon he aſſigns for *univerſal doubting*, is the very worſt, I think, that could be given; the ſuppoſition, to wit, *that God may be malicious and a deceiver. Quid autem nunc ubi ſuppono deceptorem aliquem potentiſſimum, &, ſi fas eſt ita dicere, malignum, datâ operâ in omnibus quantum potuit, me deluſiſſe* ——— May we not here ſay, that this is a coſtly way of doubting, which forces *Des Cartes* to make an *almighty devil* of the Deity before he can make his doubting feaſible? They who have the lameſt notions of the Deity, conceive him as ſomething perfect: he ſays elſewhere, *Ex quibus ſatis patet illum* [*Deum*] *fallacem eſſe non poſſe: omnem enim fraudem, & deceptionem, à defectu aliquo pendere, lumine naturali manifeſtum eſt.* If this is plain from the light of nature, eſpecially to ſuch men as *Cartes*, and I believe no body will deny it; was it philoſophical in him to ſuppoſe God a deceiver, merely that he might doubt of truths, which otherwiſe forced his aſſent? Pray obſerve whether I do him injuſtice. He ſays, *Nam ſive vigilem, ſive dormiam, duo & tria ſimul juncta ſunt quinque, quadratúmque non plura habet latera quàm quatuor; nec fieri poſſe videtur ut tam perſpicuæ veritatis in ſuſpicionem falſitatis incurrant:* and yet in the very next ſentence the reaſon why he doubts of theſe ſelf-evident truths, is no better than becauſe God may be a deceiver. Is it not mighty inconſiſtent to ſuppoſe an *evidently falſe thing* true, that he may be at liberty to ſuppoſe *evidently true things* falſe? But leaving this, I ſhall only obſerve, that the manner in which he ends his meditations is very remarkable ——— *Sed hyperbolicæ ſuperiorum dierum dubitationes, ut riſu dignæ ſunt explodendæ, præſertim* ſumma illa de ſomno, quem à vigiliâ non diſtinguebam; nunc *enim adverto permagnum inter utrumque eſſe diſcrimen* ——— By ſpeaking thus [*nunc enim adverto*] *Des Cartes* would have it thought, that he had got *a new light* from this manner of univerſal doubting: though one muſt be at a loſs to conceive whence the light could come. Could he not perceive the difference between *dreaming* and *not dreaming*, till he had firſt called in queſtion the truth of ſelf-evident propoſitions? Muſt every individual man follow this method, before he can tell whether he be awake, or aſleep? Or can the forcing ourſelves to ſuppoſe God an *Almighty Deceiver*, be the only way to diſcover that he is a Being of infinite veracity! Whatever *vertue* ſuch a method of doubt-

than he was before? Or if being reduced to the neceſſity of ſuch a method before he can doubt, be not itſelf the greateſt mark of certainty.

ing

ing may have, to open a *Philoſopher's* eyes; I am ſure it will never open any body's elſe. The only thing I can find worth our imitation through the whole method, is *the exploding this hyperbolical doubting, as deſerving our laughter*; though it was inconſiſtent in him to ſpeak thus of it, if it had ſerved him for ſuch great purpoſes (*c*).

(*c*) I ſhall here take notice of ſome exceptions made to the reaſoning in ſome of the preceding paragraphs, and endeavour to remove them. It is obſerved, that D. *B.*'s ſcheme takes away the exiſtence of *other minds*, and perhaps of *our own*, and of all ſorts of *ſubſtrata*, as they are called; and therefore that moſt of what I have ſaid ſeems right. But then it is added, "It is true, one *Sovereign Mind* may be ſufficient to produce all theſe ideas; and many Philo- "ſophers affirm, that *He* actually produces them in us, though they allow the *objects to exiſt*. "The queſtion is, Whether he produces them according to a certain order, and certain laws "eſtabliſhed by himſelf; or whether he produces them agreeably to the real ſtate of a *certain* "*third object*, which we call the *ſenſory*. D. *B.* will ſay, that the *order* and *laws* which "rule their connexions and appearances in our minds, are in every reſpect the ſame to us, "as the real exiſtence of the material Univerſe. From *this order*, he will anſwer your query, "How he can *communicate* his thoughts to others, on which you ſeem to lay much ſtreſs. "And this order will ſerve him to anſwer your queries about the beauty of nature, and of na- "tural philoſophy.——If he had contented himſelf with denying the actual exiſtence of "matter, he would have avoided many abſurdities."

In anſwer to this, I own, firſt, I do not ſee that D. *B.*'s reaſoning takes away the exiſtence of *our own minds*, or invalidates *Des Cartes*'s principle, *Cogito ergo ſum*. Thoſe *Philoſophers*, who allow the *objects* of our ideas to exiſt, affirm, I think, without neceſſity, That the Sovereign Mind *produces* the ideas of them in us; in ſo far I mean, as the objects themſelves may do this; or otherwiſe than by *co-operation*. Matter, I know, cannot act of itſelf; or it acts only by reſiſtance; but if the reſiſtance between the matter of our bodies and other matter, be enough to excite the idea of that reſiſtance in our minds, it would be unneceſſary to ſuppoſe *God* to excite the idea, and the reſiſtance itſelf to have no effect. And if we do not allow that the matter of our bodies affects our minds directly, and by itſelf; the union between them will ſeem in a great meaſure to no purpoſe. The reaſon, I believe, why thoſe *Philoſophers* affirmed that God excited the ideas of matter, and material action in our minds, was, becauſe we cannot formally conceive the manner how *matter* affects *ſpirit*, or how ſpirit acts on *matter*; but we are certain this is matter of fact in many inſtances, whether we conceive it or not. The Deity himſelf moves matter, in almoſt all the phænomena of nature; and the ſoul of man perhaps moves ſome matter of the body, though in an infinitely leſs degree.

And as to the manner in which our ideas are produced; *though they are produced agreeably to the real ſtate of a certain third object, which we call the ſenſory*, they are nevertheleſs produced according to a certain order and laws eſtabliſhed by this *Sovereign Mind*; the one of theſe doth not exclude the other. To allow this *third object*, the *Senſory* namely, is all that is deſired. To allow this, and conteſt the exiſtence of *material objects* would be inconſiſtent.

D. *B.* cannot anſwer my *firſt Query* concerning *communicating his thoughts to others*. For if *any Being* excites the ideas of *other men's bodies* in us; if, as he maintains, it is *impoſſible* and *contradictory* there ſhould be any ſuch bodies; and if it be from theſe deluſory ideas which

this Being excites in us, that we infer the exiſtence of other men's minds: how can he be certain of the exiſtence of their minds, which he collects from falſe appearances? 'Tis he himſelf who has made the foundation of all a *cheat* and *impoſture*. But ſuppoſing the *ſame Being* excited in us directly the ideas of other men's minds; how could we have a greater certainty in the one caſe than in the other? The veracity of *this Being* becomes now ſuſpected. And why ſhould we truſt him again after a *former illuſion? Cartes* only ſuppoſed, but this *Author* endeavours to prove him a *Deceiver*. He ſhould by all means have given a Demonſtration of the exiſtence of men's minds, when he aſſerts the exiſtence of their bodies impoſſible, by which only we inferred the exiſtence of their minds. And if the argument which I have taken notice of in N° 9. be good; he can offer no proof for the exiſtence of their minds, which will not equally prove the exiſtence of their bodies. So difficult is it, I conceive, to anſwer this Query. Beſides, how can it be ſaid that D. *B.* may anſwer this Query; and yet at the ſame time be owned, that his reaſoning takes away the exiſtence of *other minds*, nay and perhaps of our own too?

Nor do I think he can anſwer the *other Queries* concerning the *beauty* and *order* of the Univerſe. Can a thing impoſſible and contradictory have any beauty, or order, or, in general, *any property?* I have ſhewn in N° 21. that even *Infinite Power* could not prompt us with the ideas of this beauty, order, or properties, any farther than as they relate to theſe very objects, which are controverted. And if theſe objects be impoſſible to exiſt, it is farther evident, *that the Infinite Mind itſelf could have no ideas of them*; for of an impoſſible thing there can be no conception. We muſt *neceſſarily* therefore, in explaining the *phænomena of nature*, ſuppoſe the exiſtence of the objects of our ideas; ſince *theſe phænomena* are true only of the objects of our ideas, not of our ideas themſelves. What I mean is, though we conceive the beauty, order and proportion in the Univerſe *by our ideas*, we do not conceive theſe to be beauty, order, or proportion exhibited *in our ideas*, but in the things we ſuppoſe the *objects of them*. I have ſhewn in a place or two above, what *ridiculous* philoſophy it would make, to ſubſtitute our *ideas* inſtead of the *objects* of them. Therefore, I think, D. *B.* could have no reaſon to ſay, *That the order and laws which rule the connexions of our ideas, and appearances in our minds, are in every reſpect the ſame to us as the real exiſtence of the material Univerſe.* This, I conceive, is a great miſtake; and the generality of men allow too haſtily, that it is conſiſtent enough with philoſophy to ſuppoſe nothing but ideas, inſtead of the objects of ideas; and that demonſtrations may be given, and the phænomena explained, as well upon the one ſuppoſition as the other. This is that which hath made D. *B.*'s ſcheme appear *ſo impregnable*, and in effect not altogether abſurd; whereas in truth, *no one appearance in nature* can be explained, nor *any one propoſition* in abſtract geometry demonſtrated, without ſuppoſing the objects of our ideas, inſtead of our ideas themſelves.

As this is the main difficulty, I ſhall endeavour to make it plain by an inſtance or two. It hath been ſhewn in N° 17. that our ideas, as they are in the mind, have no parts nor magnitude; and our Author's ſcheme ſuppoſes, or rather aſſerts this. A want of extenſion *in rerum naturâ* is the great principle. Let us then take this propoſition, *In a right angled triangle, the ſquare of the hypotenuſe is bigger than either of the ſquares of the other ſides* (as being really equal to them both). Now this propoſition is directly falſe, if you ſubſtitute the *idea* of this ſquare inſtead of the *ſquare itſelf*, which is the object of the idea; for this idea hath no parts nor magnitude whereby to exceed the other ideas; and it is abſurd to ſay it is either *greater* or *leſs* than another idea, or equal to two or more, or to inſtitute any *proportion* between them; for all ſuch proportion is in reſpect of *dimenſions* or *magnitude*, which can never

be applicable to ideas, either in reality, or on the Author's Scheme. And the argument is the ſame in reſpect of all *lines*, *ſurfaces*, *ſolids*, *angles*; every thing about which geometry is converſant. And as to *philoſophy*, I need not give an inſtance in it, after what hath been ſaid in N° 20. If we apply this propoſition [*The ſpaces run over by a body, falling by its own gravity, are as the ſquares of the times*] to our ideas, inſtead of their objects; it is downright *nonſenſe* and *contradiction*. In ſhort, it is as trifling and ſophiſtical, becauſe all demonſtration *is in ideas*, to ſay it is converſant about no *object but ideas*; as it would be to ſay, becauſe all demonſtration muſt be pronounced in *words*, or written on *paper*, it can relate to nothing but the *words* it is pronounced in, or the *paper* it is written upon. Omitting therefore other inſtances, I ſhall give one, which ſeems to prove directly the exiſtence of objects without the mind, and that from the *perceptions* of the mind itſelf.

If our ideas have no parts, and yet if we *perceive parts*; it is plain *we perceive ſomething* more than *our own perceptions*. But both theſe are certain; we are *conſcious* that we perceive parts, when we look upon a *houſe*, a *tree*, a *river*, the *dial-plate* of a clock or watch. This is a ſhort and eaſy way of being certain that ſomething exiſts without the mind. We are certain of this from *conſciouſneſs itſelf*; ſince we are as conſcious that we perceive parts, as that we have perceptions at all. And this argument proves at once, *and from the ſame perceptions*, the exiſtence of *both the parts* of our compoſition; (ſee the Note *(r)* N° 17. above) and therefore makes the exiſtence of both equally certain. Our ideas as they are in the mind, are without parts; and as they make us *conſcious* of perceiving parts, *we are conſcious* that an extended object exiſts without the mind, where the extended image is exhibited, *viz.* an extended *ſenſory*. Our *very ſenſations*, and the faculty of *imagination*, as much prove the exiſtence of this ſenſory, as they prove the exiſtence of the *ſenſitive Being*; and this whether it be in a *dream*, *fever*, or *any way* a Sceptick pleaſes to ſuppoſe, provided only *parts* be perceived. The wildeſt *chimæras* in ſleep prove the certainty of the thing they were brought to render ſuſpected. If theſe *Senſories* were not, there would be no ſuch illuſions: and if *ſome other cauſe* than matter, did not make theſe impreſſions, there would be ſtill no ſuch illuſions. Our ſleeping ſenſations infer the exiſtence of *one cauſe more*, than our waking ſenſations ſhew us.

I am perſuaded, if *Des Cartes* had obſerved this property of our ideas as they are in the mind, *viz.* that they are without parts or extenſion, (and the definition he gives of an idea which I have quoted above, leads him directly to it) he would have owned that *the ſame perception of parts* proved to us the exiſtence of both ſubſtances. He does indeed in ſome places point full at this truth. *Præterea* (ſays he) *ex imaginandi facultate, quâ me uti experior, dum circa res materiales verſor, ſequi videtur illas exiſtere.* He ſaw here there was no other way of accounting for the faculty of *imagination*, but by the exiſtence of a material ſenſory. It were to be wiſhed, he had gone a little farther. But he comes ſtill nearer below. —*Ad hæc conſidero* iſtam vim imaginandi *quæ in me eſt, prout differt* à vi intelligendi, *ad mei ipſius, hoc eſt, ad* mentis meæ eſſentiam, *non requiri*; *nam*, &c. Meditat. 6. How near is this to proving the exiſtence of *both Subſtances* from the *ſame perception* of parts or extended images!

One who conſiders this argument, can make no objection to it from the *images* formed by *ſpecula*. For theſe are *extended*, and *prove* what I advance, as much as any appearance. In this inſtance, *magnifying* the *image*, i. e. *enlarging the extenſion of it*, is the great end propoſed. And every one knows that ſuch images are formed by *rays* of *light*, which are corporeal things. Neither can there be any objection from the power of an *omnipotent Being*, who may exhibit *extended*, *figured images*, without any extended, figured ſubject, in which they may inhere.

inhere. To bring in Omnipotence to help out an objection, by performing a contradiction, ſuch as, to make *properties* exiſt by themſelves without a *ſubject*, is ridiculous to the laſt degree.

Others will determine how far this realizes our knowledge concerning matter and material objects. Mr. *Locke* ſpeaks of *ſenſitive knowledge* with much fairneſs and candor, giving it the third place, or making the degrees of our knowledge to be *intuitive*, *demonſtrative*, and *ſenſitive*; (ſee Note *(x)* N° 23.) but with much ſubmiſſion, the exiſtence of matter in general, or at leaſt of material Senſories to which the ſoul is united, ſeems to me, from what has been ſaid, to be nearer *intuitive* than *demonſtrative* knowledge, if the ſame *perception* of *parts*, proves to us both the *ſpirit* and a *material ſenſory*. Be it as it will there is but one ſtep in the Demonſtration, *viz.* to ſhew that perceptions, as in the mind, have no parts. But D. *B.* confounds *perception* as in the mind itſelf, with the *image* perceived in the ſenſory; and thus endeavours to make our own perceptions of no uſe to us in ſhewing us the exiſtence of matter. We had the *conviction* in our own *conſciouſneſs* and *perception*; but he made us believe we had it not; and then we were at a loſs to find it any where elſe. A certain great *Author* ſeems to follow the ſame tract.——"But thought (ſays he) we own pre-eminent, and confeſs the real-" leſt of Beings; *the only exiſtence* of which we are made ſure by being conſcious. *All elſe* " *may be only dream and ſhadow.* All which even *ſenſe* ſuggeſts may be deceitful; the ſenſe " itſelf remains ſtill; reaſon ſubſiſts; and thought maintains its elderſhip of Being, *&c.*" This is carrying things too far. From what has been ſaid juſt above it appears, that we are *ſure* of the exiſtence of matter by being conſcious, or having perceptions of ſome kind; that as long as ſenſe or ſenſations remain, this is certain; and that our very dreams ſhew that *all elſe* is not a dream. This Author elſewhere makes matter as neceſſary as *thought itſelf*; and here he ſays, all that ſenſe ſuggeſts may be but a dream. It is hard to reconcile this. If matter be as neceſſary as thought, and yet but a dream; nothing at all will be leſt real.

From what is here ſaid it will follow, that ſeparate Spirits have a ſuperior power or faculty of conceiving extended ſubſtance, and not our formal manner of *imagination*; but this, I think, is as it ſhould be; agreeable to reaſon and philoſophy. We are under a neceſſity, as hath been ſaid before, of applying to impreſſions on the ſenſory; being by our union kept at a diſtance from the objects of ſenſation: in ſuch a ſtate the ſenſory muſt be a *neceſſary artifice* to ſupply that defect. Hence our preſent *imagination* and *reminiſcence*, are but a kind of *vicarious faculties*, in which ſeparate Spirits muſt exceed us. Theſe inferior *helps* ſeem in *them* to be ſwallowed up *in intellect*, or the beſt way of conceiving. That wonderful appearance taken notice of in the end of the laſt Section, makes this in ſome meaſure conceivable. That there is a Superior way in this caſe is certain. The Deity is not confined to our narrow faculty of imagination; every thing is *intellect* in him. It may be ſo in a lower degree in created ſeparate ſpirits. All this is more intelligible and reaſonable than to run into the contradiction of aſſerting that living Beings can know, or perceive nothing, when not confined to dead matter. But to return.

As to what is ſaid, that *if D.* B *had contented himſelf with denying the actual exiſtence of matter, he had avoided many abſurdities*; I muſt obſerve that this is a common miſtake, and too readily allowed by us. It ſhould be conſidered, that if he had granted the exiſtence of matter a poſſibility, he could not have had one argument for denying it to exiſt actually. Why deny a thing which is allowed poſſible enough to be, and which hath all the reaſons that the nature of things can admit of, to ſhew that it actually is? To have written Books then *againſt the actual*

actual exiſtence of the Univerſe, would have appeared, if poſſible, a more extraordinary attempt, than the preſent. Let any one, to ſatisfy himſelf, try if he can find out a reaſon, on this ſuppoſition.——"It is very poſſible the world may exiſt, yet it is certain that it doth not re-" ally exiſt, becauſe——". Or thus: "There is no impoſſibility in ſuppoſing myſelf " to have hands, feet, and a body; and yet nothing is more true than that I have *neither hands, feet, eyes*, nor *ears*, for ——". It is not conceivable what plauſible reaſon a man could aſſign to fill up theſe arguments. But let us ſuppoſe that one ſhould recur to the *great topick* and *pretence* for doubting, *viz.* our dreams, and ſay, "I find that I am often impoſed " upon and deceived in dreams; therefore, *&c.*" I reply; "Thoſe things which you dream " of, and ſee in your ſleep, really exiſt; and it is very poſſible for the ſame *individual Being* " to become a *man*, a *brute animal*, a *monſter*, *&c.* ſucceſſively, as you ſee it *repreſented*. " How can you diſprove this apparent exiſtence; or ſhew it not to be real, and that you are " impoſed upon in ſleep?——By the teſtimony of your ſenſes perhaps; ſince you neither " hear nor ſee theſe things when you awake?——I anſwer, This is ridiculous in you; " you are inconſiſtent with yourſelf; you make oppoſite reaſons conclude the ſame thing; " you have quite thrown aſide the teſtimony of your ſenſes, when you conclude againſt that " teſtimony, *that the material world doth not really exiſt*. If ſenſe can prove any thing, your " whole ſcheme is an abſurdity." Thus theſe men cannot prove a dream *to be a dream* on their own principles: The reaſon is, they ſuppoſe all a dream antecedent to any proof, and make uſe of *that ſuppoſition* as a proof; as was argued in the beginning of the Section. This comes from caſting off the teſtimony of ſenſe. There is no laying aſide the methods of certainty which God hath appointed, and finding any conſiſtent *ſuccedaneum* in the place of them. We ſtumble from one abſurdity to another, till at length we are loſt amidſt the inextricable mazes of *error* and *contradiction*. And from all this it appears, that to allow the exiſtence of the material world poſſible, and yet deny its actual exiſtence, is at leaſt as difficult as the method D. *B.* has taken to deny it; he had not another poſſible method to anſwer his purpoſe, but to pretend it could not exiſt.

Some other objections have been made, but not urged with that candor, ſtrength and accuracy as the former; however, I ſhall mention them. One is, "That the *exiſtence* of material objects " may be called in queſtion, from the different appearances they make, when placed at dif-" ferent diſtances from the eye; for why ſhould they have one *magnitude*, or *figure*, rather than " another." This, which our *Author* and his *Followers* inſiſt much on, is taken from *Pyrrho*, and his *Diſciples*——Κατὰ τοῦτον τὸν τρόπον τὰ δοκοῦντα εἶναι μεγάλα, μικρὰ φαίνεται· τὰ τετράγωνα, στρογγύλα· τὰ ὁμαλὰ, ἐξοχὰς ἔχοντα· τὰ ὁλόκ, κεκλασμένα.——It is againſt the firſt *Elements* of *Geometry*, that any object, this *Book* for inſtance, ſhould ſubtend the ſame angle by rays proceeding from it to the eye, at all the various diſtances at which it may be placed. Thus upon the ſuppoſition that objects really exiſt, there is a demonſtrable neceſſity that they ſhould appear of different magnitudes and figures, placed at different diſtances from the beholder. Hence it ſeems very unſkilful to make ſuch an *appearance* an objection againſt the real exiſtence of extended objects, which muſt neceſſarily obtain, ſuppoſing them to exiſt. If ſuch an objection prove any thing, it proves extended objects impoſſible, becauſe another *impoſſibility* cannot become *fact*; *viz.* That the *ſame line* ſhould always ſubtend the ſame angle, by lines drawn from it to any point.

It is ſaid, "I have pretended to ridicule this ſcheme, by endeavouring to put ſome propoſitions, " according to it, in ridiculous language." This I directly deny. The language into which I have put theſe propoſitions, is very proper according to this ſcheme. This was deſigned as an argument againſt

againſt the ſcheme, not as ridicule; and I ſtill think it is one. When it is ſaid in the objection, "That an *object* (this *Book*, v. g) placed within a foot of the eye, appears of one magnitude; and removed to the diſtance of ten feet from it, appears to be of another; and at the "diſtance of a hundred yards, ſtill of another, *&c.*" I aſſert that this is no language for this ſcheme; or it is captious and ſophiſtical language. It ſhould be "The *idea* of a Book, "placed within the *idea* of a foot of the *idea* of the eye, *&c.*" To expreſs this in common language, and yet ſuppoſe the expreſſion proper, is firſt to ſuppoſe the Book *placed*, and *really exiſting*; and then to infer from this ſuppoſition *that it is only an idea*. To apply common language to a quite contrary ſenſe, and then to ſuppoſe this *arbitrary application* an argument to overturn common ſenſe, or to contend for the *propriety* of ſuch application, is as inconſiſtent as any thing in the ſcheme. It is plain *figure, diſtance, magnitude, motion*, are no language on this hypotheſis. Theſe are ſuppoſed real in the *language*, and it is thence concluded there are no ſuch things. This is an open fallacy. It is certain, arguments for a *true hypotheſis*, may be expreſſed in words agreeable to that hypotheſis; and not in ſuch a language as *contradicts* and *ſuppoſes it falſe*. And ſince it is impoſſible for any man living, to do this on our *Author*'s principles; this itſelf is an invincible argument againſt them. Common language is adapted to the *objects* of our ideas, and *theſe principles* to the *ideas* of objects: this muſt occaſion a conſtant oppoſition between any language and theſe principles, and ſhews that they contradict common language, as much as common ſenſe.

SECT. VIII.

That matter is not eternal and uncauſed, nor the eternal effect of an eternal cauſe.

IT hath been ſhewn in the firſt and ſecond ſections above, what kind of a ſubſtance matter is: it appears to be a *ſluggiſh, inactive, lump*; not only not endued, but utterly incapable of being endued with any *active power*. The nature of it conſiſts in being *ſolidly extended*, or ſo extended as to *reſiſt*. Hence *reſiſtance* is fundamental in its nature: and hence again ariſes an impoſſibility of its *effecting* what it reſiſts, *viz.* any change of its preſent ſtate. If we ſhould conceive it once *placed* in any part of the immenſity of ſpace, (though we could not even conceive it placed *at firſt* in that part rather than another, without ſome *external cauſe* to determine this particular *location*;) if, I ſay, we ſhould conceive it once thus placed, we muſt after that conceive it to remain *in that place* to all eternity; to continue in *that ſhape* or *figure*, and with the ſame *relative ſituation of its parts*; without any poſſibility of change or variation; unleſs we allow of an *immaterial Cauſe*, which could effect a change in ſuch a dead

a dead substance. And in consequence of this it appeared that an *universal, indefinent, various impulse* from an immaterial Cause, was necessary to be impressed upon it, to effect all those changes it undergoes, and to produce all those regular and beautiful *vicissitudes* which we behold in nature; and that the incessant and universal influence of *this Cause* is that which constantly *supports* the material world. It was moreover shewn that this *inert substance* cannot *resist* but in proportion to its *quantity*. And since the *least parts* make the greatest resistance, that they may not be put out of their relative situation among themselves; *this itself* appeared to be *the power* of this immaterial Cause, indefinently impressed upon, and exerted in every possible part of matter. And since without this, *these least parts* could not *cohere* at all, or make a solid, resisting substance (*a*); it appears that the power of this Cause thus incessantly put forth through all its possible parts, is that which constitutes the *solidity* and *resistance* of matter. And hence again it follows that, as the power of this Cause constantly exerted, constitutes the nature and solidity of matter *now*; so it could not have been a solid resisting substance *at first*, or for any the *least time*, without the power of this Cause thus exerted. And thus the great question concerning the *rise* and *origine* of matter, seems to be naturally and easily determined, from what has been already shewn in these two sections. For from this it appears to be a *thing caused*, at whatever time it may have been brought into existence: and nothing can be more against reason than to suppose, that such a *dead, inactive substance* (a substance, which wants the power of a *foreign* Cause to be indefinently put forth upon it, that it may be, what it is) should nevertheless be a thing uncaused and independent. Without this *foreign influence* to effect cohesion and solidity in it, we could not conceive it all to be a substance. Let us go as far as we can in the *sub-division* of parts, as long as we allow these parts to be *solid* and *extended*, we must allow them to be solid and extended by this external power exerted: and if they are not solid and extended parts, they cannot be *parts* of solid and extended substance.

This carries the point beyond the reach of objection; for to say, There might have been some *incomplete subject*, or *substratum*, eternal and self-existent, which the power of *this Cause* (by being exerted in it) constituted into a *solid, resisting* substance, would be to speak not only unin-

(*a*) Let what hath been said concerning the *cohesion of matter*, from N° 7. to N° 12. Sect. 2. be here remembered.

telligibly but abſurdly. What could this *incomplete, ſelf-exiſtent* thing be? It could not be matter, or ſolid and reſiſting ſubſtance; but ſome unſubſtantial *phantom* of matter. And I demand a reaſon from the *Patrons* of eternal and uncauſed matter, why an incomplete unſubſtantial *phantom of matter* ſhould be eternal and uncauſed; ſince the ſubſtance in its complete nature could only be a dependent effect *(b)*? Can a *half-finiſhed, imperfect thing* have a better claim to *ſelf-exiſtence*, than that whoſe nature is *full* and *complete*? Here the latter of theſe hath been manifeſtly proved to be an effect: after which it would be abſurd to the laſt degree, to pretend the former may be independent and eternal. This would be contending, without knowing what was contended for: and it is ſo far from being true, that we cannot conceive *the creation of matter out of nothing* poſſible, as is pretended, that it is even impoſſible to conceive it *ſelf-exiſtent* and *uncreated (c)*. It muſt have been created (and out of nothing too; not

(b) All this would be the *counter-part* to *Ariſtotle*'s figment of *ſubſtantial forms*. The *phantom* of ſubſtance, (which is the ſame as *unſubſtantial* ſubſtance) and ſubſtantial *forms*, ſeem to tally in making up ſomething like real ſubſtance between them, if we could conceive either of them to ſubſiſt without the other; but they muſt either be both *ſubſtances*, or both *ſhadows*. And in the terms to which the controverſy is here reduced, the Deity contributed the one part in finiſhing the ſubſtance, [the ſolid and reſiſting nature of matter] which ſeems the only ſubſtantial part: and the other [the unſubſtantial phantom] is as eternal and neceſſary as he himſelf! I ſhould think men ſhould be aſhamed to ſtand by this. If we call to mind *Ariſtotle*'s definition of his *materia prima*, we ſhall find it exactly to agree to that which muſt be here ſuppoſed *neceſſary* and *ſelf-exiſtent*. It is, *Nec quid, nec quale, nec quantum, nec quidquam eorum quibus determinatur ens*. This is *empty ſound*; but it is fit enough to deſcribe an *empty phantom*, of which no man ever had, nor ever will have any notion. And yet this is that which the *Stagirite* makes eternal and neceſſary; which, if it had not been ſelf-exiſtent, the no power of any Being could ever have ſupplied!

(c) "You tell us (ſays Dr. *Clarke*, in his Diſpute with *M. C. p.* 245.) if we have not an "idea of the creation of matter out of nothing, *we muſt inevitably conclude matter a ſelf-exiſtent "Being*. I anſwer, by the ſame argument, it follows on the contrary, that if we have not "an idea of the ſelf-exiſtence of matter, [that is, *that every diſtinct particle of matter* in "the Univerſe, is a *neceſſary, independent, ſelf-exiſtent Being*,] we muſt inevitably conclude "matter to be a *created Being*. And by a better argument, it follows, if we have an idea "of the poſſibility of the *non-exiſtence* of matter; that is, if we have an idea that Space can "(without a contradiction) exiſt without matter in it; we muſt inevitably conclude matter "not to be neceſſarily exiſting, but a created Being." To this I beg leave to add, that the unneceſſarineſs both of matter itſelf, and the idea of it, can no way better appear, than if we compare theſe two, *Space* and *matter*, together. The one hath all the genuine marks of neceſſity; it forces itſelf upon us; it will neither be increaſed nor leſſened in our thoughts; and we cannot ſuppoſe it out of nature, but by a contradiction. It is quite otherwiſe with *matter*;

not certainly out of a half-finiſhed phantom *of a ſubſtratum*) when the power of *this immaterial Cauſe* was firſt exerted, to make it a ſolid reſiſting ſubſtance.

II. This might ſuffice; but this old controverſy is ſtill varied into new and different forms; the idea of eternal and uncauſed matter is pretended to be the only conſiſtent idea we can have of it; and abundance of other difficulties are endeavoured to be raiſed. Wherefore we ſhall proceed to conſider the idea which all men naturally have of matter, and to ſhew from *that*, and from many *circumſtances* in its exiſtence, which muſt be determined by an *external Cauſe*, before we can conceive it to exiſt at all, that it muſt have had a *commencement* ſome time or other. It is to be obſerved

matter; we may ſuppoſe *more* or *leſs* of it to exiſt, or even that once *none at all* exiſted, without any violence offered to our ideas. When we diſpute Space out of exiſtence, we endeavour to obſcure one of the cleareſt ideas we have of neceſſary exiſtence; but after the heat of argument is over, I am apt to think every man finds in his own breaſt that this is impoſſible to be effected.

With reſpect to the *impoſſibility of creating matter*, a certain great *Author* ſeems very poſitive. I ſhall here give his argument, and endeavour to anſwer it. He ſays, ſpeaking to the other *Perſon* in the Dialogue.——"In the firſt place, give me leave to wonder that, inſtead of the "many arguments commonly brought for the proof of a *Deity*, you make uſe only of one "ſingle one to build one. I expected to have heard from you, in cuſtomary form, of a *firſt* "*Cauſe*, a *firſt Being*, and a *beginning of motion*: how clear the idea was of immaterial ſub- "ſtance; and how plainly it appeared, that ſome time or other matter muſt have been created. "But as to all this you are ſilent." [Thus our Author, I think, endeavours to get quit of this kind of reaſoning, with a pretended *contempt*, inſtead of argument.] "As for what is "ſaid of a *material unthinking Subſtance* being never able to have produced an *immaterial* "*thinking one*; I readily grant it: but on the condition that this great maxim of *nothing* "*being ever made from nothing*, may hold as well on my ſide as my *Adverſary's*; and then, I "ſuppoſe, that *whilſt the world endures, he will be at a loſs how to aſſign a beginning to* "*matter*, or how to ſuggeſt the poſſibility of annihilating it. The *ſpiritual men* may, as long "as they pleaſe, repreſent to us, in the moſt eloquent manner, that matter conſidered in a "thouſand different ſhapes, joined and disjoined, varied and modified to eternity, can never "of itſelf, afford one ſingle thought, never occaſion or give riſe to any thing like ſenſe and "knowledge. Their argument will hold good againſt a *Democritus*, an *Epicurus*, or any of the "*elder* or *latter Atomiſts*. But it will be turned on them by an *examining Academiſt*; and when "the two Subſtances are fairly ſet aſunder, and conſidered apart, as different kinds; 'twill be *as* "*ſtrong ſenſe*, and *as good argument*, to ſay as well of the immaterial kind, That do with it "as you pleaſe, modify it a thouſand ways, purify it, exalt it, ſublime it, torture it ever ſo "much, or rack it, as they ſay, with thinking; you will never be able to force the contrary "Subſtance out of it. *The poor dregs of ſorry matter* can no more be made out of the ſimple, "pure ſubſtance of immaterial thought, than the *high Spirits* of thought or reaſon, can be ex- "tracted from the groſs Subſtance of heavy matter. *So let the Dogmatiſts make of this argument* "*what they can.*"

that the two general hypotheſes, on which men have choſen to build the eternity of matter, are, *firſt*, That it is eternal and uncauſed; and *ſecondly*, That it is the eternal effect of an eternal cauſe. Of theſe in order. And here I muſt take notice, that men have added to the natural difficulty of this ſubject, by ſtarting all manner of *ſubtile* and *wire-drawn* objections to hinder any concluſion from being eſtabliſhed: and then they complain of the *ſubtilty* and *abſtractedneſs* of the arguments; as if that were not occaſioned by themſelves. Every objection muſt be anſwered according to the nature of the argument it contains; and for men to have recourſe to ſubtilties in raiſing difficulties, and then complain that they

This is a bullying Defiance, and the argument is treated in a very metaphorical manner. But paſſing by other things, the *Academiſt* grants here, both *material* and *immaterial Subſtance* to exiſt, or a Subſtance which is ſolid and reſiſting, and a Subſtance thinking and intelligent, as diſtinguiſhed, and (it ſeems) equally eternal. And he will be forced to own that if there be an intelligent Being any way perfect, there muſt be *an infinitely perfect intelligent Being*: for whatever Being is neceſſary, cannot be *neceſſarily* limited and imperfect. And if there is an infinitely perfect Being, he muſt be infinitely powerful and knowing, or what we call *God*. Now the argument comes to this, I preſume, *That, if matter could not create God*, or if this on the one hand is certain, it is no leſs certain on the other, *That God could not create matter*: Or, *if a powerleſs, dead lump could not create an infinitely powerful, living Being; no more could an infinitely powerful living Being create a powerleſs dead ſubſtance*. The examining Academiſt may ſhew the *parity of reaſon* here, on which his argument is founded; or examine if there be any diſparity; for to others who cannot examine ſo well, the diſparity ſeems infinite. The condition which he demands may be allowed, as well on his ſide, as his Adverſary's, *That nothing can ever be made out of nothing*, ſuppoſes that an infinitely powerful *Being* is as unable to create *a new Subſtance*, as dead matter is unable to perform the like effect. This is too large a *poſtulate* to be granted ſo eaſily; but of this more afterwards. Beſides, it ſeems wrong to contend that a *dead ſubſtance* muſt as neceſſarily have been without origin, as a Being of infinite perfections; merely becauſe ſuch a Being had not perfection enough to produce this ſluggiſh inert ſubſtance. This looks like denying a Being of infinite perfections. In his way of *extracting, exalting, ſubliming*, it would appear the *Author* imagined that matter was to be made out of *immaterial* or *thinking Subſtance*, as a pre-exiſting ſubject; or that *Spirit* was the *materials* from which the *ſorry dregs* of matter was to be drawn by a ſort of chymical proceſs. A little more *argument* and leſs *metaphor* would have been more convincing. If any thing *exiſted neceſſarily*, it was the very *ſorry dregs* of matter; for every thing *ſolid* and *ſubſtantial* in it appears to have been produced in time. Laſtly, All this flouriſh is no more than what *Pyrrho* and the *Scepticks* affirmed long ago. They ſaid, " An *incorporeal ſubſtance* " could not produce *body*." The reaſon they gave was, " becauſe " no incorporeal thing produces body." And again, " *Body* doth not produce any *thing in-* " *corporeal*, becauſe the *thing produced* muſt be made out of a paſſive ſubject, or pre-exiſting ma- " terials. ——— Ἀσώματον δὲ σώματος οὐκ ἔστιν αἴτιον· ἔστι δὲν ἀσώματον ποιεῖ σῶμα· σῶμα δὲ ἀσωμάτε οὐκ ἂν εἴη αἴτιον· ὅτι τὸ γιτόμιτον, τῆς παρχόσης ὕλης ὀφείλει εἶναι· Diog. Laert. Pyrrho. Hence it would appear, the *examining Academiſt* goes no farther, than the *doubting Sceptick*.

ſhould

ſhould be taken off by minutely examining theſe ſubtilties, is a ſtrange kind of procedure. And to thoſe who would deſire to have the point fairly determined, without troubling themſelves with abſtract arguments on either ſide, the reaſoning in the laſt paragraph, it is preſumed, will give ſatisfaction; and indeed more is unneceſſary to any fair Enquirer.

III. Now as to the *idea* of matter, a man, I think, muſt commit great violence on his mind, who raiſes it into the idea of a *neceſſarily exiſting Being*. Not to mention that this is a falſe idea of it, as appears from what has been ſaid; our common obſervations concerning it, ſeem to ſuggeſt to us, that it is only a *thing contingent* and *paſſive*. We can diſcover no perfection in it; it ſeems to be altogether ſubject to the power of *active Beings*; it is toſſed about from place to place; the figure of it is changed all manner of ways; we faſhion it as we pleaſe; and all the trouble it gives us, is only from its *deadneſs* and *inactivity*, things the fartheſt poſſible from heightening our ideas of any ſubſtance. Theſe are the firſt and moſt general notions of mankind concerning matter: and if *ſpeculative men* begin to conſider it in a more accurate and philoſophical way, they will diſcover nothing that can heighten their conceptions. Allowing we could not have an *idea* of the *creation of matter*; (though ſomething very like the certainty of this *creation* hath been proved in N° 1.) yet if we offer to form a contrary idea of it, *viz. that it is eternal and uncauſed*; ſo many abſurdities ariſe, as ſhew we offer violence to our reaſon. The conſequences of this ſuppoſition are, That matter muſt be *ſelf-ſufficient* in its own nature, or ſuch a ſubſtance as *owes nothing* to any other *Being*; that it is contradictory to ſuppoſe *one atom* of matter *leſs* or *more* in the Univerſe; or to ſuppoſe it not to have exiſted in all *time paſt*, or not to exiſt in all *time to come*. But every particular of theſe is falſe, and proves this to be a *falſe idea*. It hath been ſhewn that matter *owes* its very *nature* and *ſolid extenſion* to an *immaterial Cauſe*; and the quantity of it is entirely arbitrary, which is a plain conſequence of the former. Every atom of matter is a *diſtinct ſubſtance*; and nothing can be more *unſupported* than ſuppoſing ſuch an *infinite number* of *neceſſary*, *ſelf-exiſtent*, *diſtinct Beings*. And if *any atom* in the whole number is not rigidly neceſſary, ſo that it would imply a contradiction for it not to exiſt; *no one atom* in the whole maſs is neceſſary, and the ſuppoſition itſelf falls to the ground.

That which forces us to own the exiſtence of any thing neceſſary is, becauſe it would imply a contradiction to ſuppoſe the contrary: and if

every

every atom of matter exiſted eternally, and without a cauſe, it would be as contradictory for it at any time not to have exiſted, as for *the ſame thing to be, and not to be at once.* In this caſe, the contradiction muſt be as far extended backward, as that ſuppoſition on which it is founded, *viz.* to eternity; for the atom is ſuppoſed eternal, and uncauſed: and *this axiom*, which is otherwiſe *conditional*, becomes here *unlimited*; the condition being removed by ſuppoſition. Hence it muſt have been eternally a contradiction for ſuch an atom not to have exiſted: but thoſe who have maintained the eternity of matter, have never been able to prove it; ſo far is *the non-exiſtence of an atom* from implying a contradiction. Whence, as I ſaid, this ſuppoſition cannot be true, nor the idea of *uncauſed matter* a juſt idea.

IV. To make this reaſoning the more eaſily underſtood, I ſhall take notice of a difficulty which I am told will lie againſt it. It is ſaid that though from a thing's exiſting *neceſſarily* we can infer that it hath exiſted *eternally*, for there the conſequence is plain; yet it is not ſo clear converſely, that from a thing's having exiſted *eternally* we can infer that it exiſts *neceſſarily*, ſo as to imply a contradiction in being ſuppoſed not to exiſt; and that the greateſt difficulty in this argument is to make out this connexion. But I anſwer, If matter had no cauſe of exiſtence, it muſt be *ſelf-exiſtent*, or exiſtence muſt belong to its nature; there is no medium: and if it be ſelf-exiſtent, it muſt *exiſt neceſſarily*; a thing whoſe exiſtence is of itſelf, and belonging to its nature, cannot be indifferent *to exiſt* or *not exiſt*: and if it exiſts neceſſarily, it muſt alſo be *independent* on any thing elſe for its exiſtence. So when we ſuppoſe matter uncauſed, we do as much as if we ſuppoſed it *ſelf-exiſtent*, *neceſſarily exiſting*, and *independent* on any thing elſe for its exiſtence: and whatever contradiction there is in ſuppoſing a neceſſarily exiſting Being not to exiſt, the very ſame there will be in ſuppoſing an eternal and uncauſed Being not to exiſt, or uncauſed matter not to exiſt: and the contradiction will appear thus. If any one ſhould think there is only one neceſſary Being, and at the ſame time with the Atheiſt ſhould add, that matter is this Being, (ſince it is a plain contradiction that once nothing at all might have exiſted) if he ſuppoſes matter at any time not to have exiſted, this contradiction comes full home to him. [It would have been abſurd in *Lucretius*, who ſaid, *Nothing exiſted but matter*, to have ſaid, *Once matter itſelf might not have exiſted.*] Or if he ſhould ſay there are *two neceſſary Beings*, of which

matter is *one*, and that ſome time or other it might not have exiſted, he not only abſurdly makes the half of neceſſary Being contingent; but ſince they are equally neceſſary, if one might have not exiſted, the other alſo might have not exiſted; and thus ſtill *nothing at all might have once exiſted:* and he will always be reduced to this, though he ſhould ſuppoſe a hundred ſuch Beings (*d*). Let it be remember'd that *uncauſed*, *ſelf-exiſtent*, *neceſſarily exiſting*, and *independent*, are all equivalent expreſſions; as appears from what has been ſaid in this paragraph.

V. We

(*d*) The argument ſhewing that matter doth not exiſt neceſſarily is of great conſequence; ſince it follows from it, that an immaterial Being muſt have exiſted neceſſarily; for it would be abſurd to ſay either that *nothing exiſts neceſſarily*, or that what exiſts neceſſarily is neither *matter*, nor *not matter*. Therefore I ſhall here remark another difficulty or two ſtarted againſt the reaſoning in theſe two paragraphs. Becauſe I have ſaid, if matter exiſted eternally and without a cauſe, it is contradictory to ſuppoſe it not to have exiſted in all time paſt, or not to exiſt in all time to come: It hath been obſerved "That ſome may look on it in the natures of *the things* "*themſelves*, as far as known to us, equally poſſible for them to have *begun to be*, or *never begun* "*to be* [as having always exiſted to wit]; or even after they have *been for ever*, *or for any* "*time*, to be annihilated by *ſome cauſe* endued with the requiſite powers." But let it be conſidered how abſurd it would be to affirm either of theſe contraries, *matter began to be*, or had a cauſe; *matter never began to be*, or had no cauſe, equally poſſible; of theſe the one muſt be unalterably *true*, and the other *falſe*; and if we know any thing, we muſt know that poſſibility cannot be equally competent to two ſuch propoſitions more than to a propoſition of *Euclid*, and the negation of it. If matter be a *ſelf-exiſtent thing*, it was impoſſible for that very reaſon that ever it could have begun to be; and *vice verſâ*, if matter *began to be*, it was impoſſible it could have been ſelf-exiſtent. Though matter may be *indifferent* to *exiſtence* or *non-exiſtence*, (where there is no neceſſity on either ſide); yet it could never be *indifferent* to *neceſſary exiſtence* or *arbitrary exiſtence*; that would be to make *neceſſity itſelf* conſiſt in *indifference*. Whence it appears, that to entertain ſuch a notion of matter, as is mentioned in the objection, would be extremely abſurd; and if it be a common way of thinking, it ought to be rectified. And farther, which ſoever of theſe two propoſitions, *Matter exiſted by a cauſe*, *Matter exiſted by no cauſe*, be the true one; yet by the rules of argument, he who ſuppoſes the one to be true muſt at the ſame time ſuppoſe the other to be falſe and impoſſible; which ſhews the argument above to proceed rightly. The laſt part of the difficulty ſhall be conſidered hereafter.

The other difficulty is of much greater conſequence. I ſay, That which forces us to own the exiſtence of any thing neceſſary is, becauſe it implies a contradiction to ſuppoſe the contrary. On this it is obſerved, "That if the *Carteſian arguments* from the idea of a "God are inconcluſive, as they are generally now allowed to be, it will be hard to ſay that "*any Being* is to us neceſſarily exiſtent in this ſenſe; that when we infer from the exiſt-"ence of other things *an eternal uncauſed Being*, it doth not come up to the ſenſe here "meant, elſe why have we recourſe to a train of reaſoning, and do not rather ſee the con-"tradiction immediately? Can the mere ſpeculation of ideas prove the exiſtence of any "thing? The exiſtence of *ſuch a Being* muſt be an *axiom*, and need no proof, ſince its non-

"exiſtence

V. We may next observe concerning matter that *if it existed necessarily*, it either existed necessarily in *one solid mass*, or *in separate and incoherent parts*. It could not exist necessarily both these ways, since the one excludes the other: therefore it existed necessarily in one of them only. But it could not exist necessarily either of these ways, since the other was equally possible,

" existence must imply an absurdity; so that in this sense nothing seems necessarily existing " to us, not even *the supreme Being*, because it is from *his effects* we discover his existence, and " not from any *sufficient reason* which discovers his existence *à priori*. That we know that " an eternal uncaused Being exists, a proof of this, *à posteriori*, is allowed; but the sufficient " reason, *à priori*, was never given; and till it can be known, how come we to be so " bold in speaking of the manner of his existence?" To all this I answer, first, that *I do think* there is a strong necessity for *the existence of Being in general*, nay, a necessity for *infinite existence*; because otherwise an *infinite* and *eternal nothing* would be necessary. It seems to me the greatest absurdity to make all existence *barely possible*, or contingent; for even that supposes some Being necessary, of which it must be *a possible effect*. And if any existence be allowed necessary, it must be *infinite existence*; for where-ever necessary existence *ends*, a necessary nothing *will take place*, either *finite* nothing, or *infinite*. But nothing can have no properties, otherwise it would be *something*. Infinite and eternal are necessary properties of *something*, and therefore of *infinite* and *eternal Being*. And this I would beg leave to call *a demonstration* of infinite and eternal existence, or Being, merely from *the speculation of our own ideas*, abstracting from effects; which if we should give up, we cannot, I think, pretend to be certain about any thing. Or let it be considered thus, that there is an absolute, unconditionate necessity either of *existence* or *non-existence*; and this will make *one* of the two universal and absolute. There cannot be a necessity for both; there would be then two absolute necessities *opposing each other*, whereby the necessity on both sides would be suspended or destroyed: nor can both be said to be unnecessary, or indifferent; that would be *a necessity of universal indifference*, or of want of necessity, whereby opposite affections of Being, [necessity and indifference] would be confounded, or made the same: and such notions applied to Being itself would make strange work in philosophy. Absolute necessity is every where alike and uniform, without difference or variety, which indeed shews *the unity* of the necessary Being, as Dr. *Clarke* observes. Now I cannot help observing, that this seems very different from the *Cartesian method*. They first of all form, if not arbitrarily, at least voluntarily, the idea of an infinitely perfect Being, and argue for the necessity of his existence from that *formed idea*: but beginning in the manner here mentioned, the complex idea of an infinitely perfect Being forces itself upon us, property by property; and the idea itself becomes necessary. Let me further observe that it seems improper to apply here Mr. *Leibnitz*'s principle of *a sufficient reason*. *This necessity* appears to me more than a sufficient reason, as it is necessity; for *necessity* is more than *bare sufficiency*. And this will hold also applied to the manner of necessary existence, which will itself, I hope, appear necessary immediately. And thus far here as to the proof of necessary Being, *à priori*, which I shall have occasion to resume in establishing the unity of the Deity.

poſſible, or implied no contradiction: that is, it exiſted neceſſarily *one of theſe ways*, and yet *neither of them*, which is a repugnancy. This argument holds with reſpect to the *location* of matter in ſome particular part of ſpace, ſince the quantity of it is not immenſe; with reſpect to the *figure* of the maſs, or of its ſeparate parts; their *diſtance*, or *ſituation*; its *ſtate* of *reſt* or *motion*, and the *direction* or *velocity* of the motion, if matter be ſuppoſed to move. In ſhort, *indifference as to the manner of exiſtence* (that is, where more ways of exiſtence are all equally poſſible) *is inconſiſtent with neceſſity of exiſtence:* for *all the ways* being, by ſuppo-

As to what is ſaid, that though a proof *à poſteriori*, is allowed, yet we can determine nothing about the manner of his exiſtence till the *ſufficient reaſon* is known; I beg leave to obſerve, that ſuppoſing no proof *à priori*, could be adduced, yet if it be ſhewn by arguments *à poſteriori*, that this Being hath no *cauſe of exiſtence* from without, it follows that he muſt have *a neceſſity of it* from within, or in his nature, juſt as effectually as it could have followed from a proof *à priori:* and this determines the manner of his exiſtence as to neceſſity, that is the neceſſity of it; and the manner of it in any other reſpect is not yet enquired into; nor are we guilty of any unwarrantable boldneſs, I think, in ſpeaking thus much of the manner of his exiſtence upon ſuch grounds. I leave it here to the judicious to conſider, whether in this caſe there be not a needleſs difference made of late, in point of concluſiveneſs, between a proof *à priori* and *à poſteriori*. What ſignifies it how we come to the knowledge of any truth, provided we come to the *certain knowledge* of it? Whether by the *ſynthetick* or *analytick* method; by beginning at the head and coming down to the foot, or by beginning at the foot and mounting to the head? In other parts of knowledge the *analytick* method is much inſiſted on, which is all by arguments *à poſteriori*; and this brings no diſadvantage to that particular ſcience, or truth. Mathematicians in Algebra begin at the end, (if I may ſo ſpeak) and argue backward: and having found out the truth this way, they make it a ſtanding theorem, to argue *à priori* from, for ever after. Why ſhould it be otherwiſe here? When by arguing *from effects* we find out that there muſt be an *eternal uncauſed Being*, why may we not make this truth a *ſtanding theorem*, and deduce all the ſame conſequences from it, as if we had ſeen it directly without inveſtigation. If we diſcover a neceſſarily exiſting Being *à poſteriori*, we have then a ſufficient reaſon *à poſteriori*, for believing his exiſtence; and if we have a ſufficient reaſon *à poſteriori*, why demand another ſufficient reaſon *à priori?*——But in truth, we have a ſufficient reaſon *à priori*, for we diſcover a neceſſity of his exiſtence, which is much the ſtronger. A *ſufficient reaſon* is only applicable in the nature of things, I conceive, when we are enquiring about *effects*; but to require a ſufficient reaſon of uneffected exiſtence (or of the manner of it, which muſt be alſo uneffected, and therefore neceſſary) ſeems to me very abſurd; it is the ſame as to require a ſufficient cauſe able to effect theſe *uncauſed* or *neceſſary things*. Laſtly, I would obſerve that the denying a neceſſary Being may imply a contradiction, and yet that contradiction want to be brought out by a train of reaſoning. The denying every true propoſition as well as *axioms*, implies a contradiction; and yet theſe want to be proved. And thoſe propoſitions may be axioms to the *quick-ſighted*, which to others will require a demonſtration.

ſition, equally poſſible, the neceſſity *of any one* of them is prevented; and therefore the neceſſity of any manner of exiſtence, or the neceſſity of exiſtence in general. In this caſe we are forced to ſuppoſe an *external cauſe* determining one particular manner of exiſtence out of more poſſible ones. And this is applicable to the condition of matter particularly: for being a *dead inactive* ſubſtance, as has been made appear, and indifferent to the ſeveral ways of its exiſting, and not being able to determine this indifference itſelf, an *external cauſe* to determine the manner of its exiſtence is abſolutely neceſſary: and ſince it could not exiſt at all *but in ſome manner*, an *external cauſe* was abſolutely neceſſary to make it exiſt *at firſt*, or to give it *any manner of exiſtence*.

VI. Here again it hath been urged, "That *indifference* as to the manner of exiſtence may not be inconſiſtent with a *Being*'s *exiſting neceſſarily* in ſome manner; if it be allow'd that a Being which owes its exiſtence to no other Being, may be affected by other Beings as to the manner of its exiſtence, which does not appear ſo abſurd as to be eaſily confuted." Whether by theſe laſt words it be meant that *God Almighty* may be affected by his *creatures* as to the manner of his exiſtence, or that *matter* which owes its exiſtence *to nothing elſe* (which by the way would be a begging the queſtion) is ſo affected as to have the manner of its exiſtence changed, I know not; only it had been proper to have ſaid ſomething in proof of this *ſuppoſition*, or to have aſſigned *the inſtance*, ſince it is made the ground of an objection. However, the abſurdity of it may appear in general thus. If a *neceſſary Being* might have the manner of its exiſtence changed by any *other Being*, it muſt depend on that other Being for the manner of its exiſtence at leaſt: and if it depended on another Being for the manner of its exiſtence, it muſt depend on that Being for *exiſtence itſelf*; ſince it cannot exiſt but *in ſome manner*. Exiſtence taken ſeparately from all manner of exiſtence is an impoſſibility, the negation of exiſtence. But it hath been ſhewn (N° 4.) that a ſelf-exiſtent Being muſt be alſo independent for its exiſtence, and therefore for the manner of its exiſtence. Nay, ſo independent is the manner of neceſſary exiſtence, that it is even abſurd to ſuppoſe it to depend on *the neceſſary Being itſelf*, or to be determined by it; for it ought to exiſt before it could determine the manner of its own exiſtence, and therefore to exiſt without determining the manner of its exiſtence; or to exiſt in a neceſſary and independent manner. Or thus, It ought to exiſt before it could determine

the manner of its own exiſtence, and yet to determine the manner of its exiſtence before it could exiſt, ſince the manner of its exiſtence is ſuppoſed dependent on, and therefore determined by itſelf; which is repugnant. In a word, if the manner of neceſſary exiſtence were *dependent*, it would be *effected*: and as we ſuppoſe it dependent on another Being, or the neceſſary Being itſelf, it would be effected by one or other of theſe reſpectively. And, ſince exiſtence cannot be without a manner, the ſuppoſition ends in this palpable contradiction, That an *uncauſed* Being *is cauſed* by another Being, or by itſelf.

VII. I am ſolicitous to remove the prejudices of men in this material point, and therefore obſerve that the *manner* of neceſſary exiſtence is otherwiſe proved to be itſelf *neceſſary*, thus. If the manners of neceſſary exiſtence are more than one, then they are either *all unneceſſary*, or contingent only; or they are *all neceſſary*; or, laſtly, *one of them* only is neceſſary. *Firſt*, if they are all contingent or unneceſſary, ſince the Being could not exiſt then but in one of theſe unneceſſary manners, it could not exiſt neceſſarily at all. For, as I have ſaid, exiſtence, taken ſeparately from all manners of exiſtence, is an impoſſibility; ſo that it is contradictory to ſay exiſtence is of a different nature from all manners of exiſtence. Conceive, if it be poſſible, a Being ſtript of all manners of exiſtence; and then enquire about the nature of its exiſtence if you can. It muſt be then annihilated, having *no manner* of exiſtence, and therefore an exiſtence of *no nature*. Exiſtence without a manner is but an abſtract idea: and hence it is that from the manner of it only it receives the denomination of *neceſſary*, *contingent*; *happy*, *miſerable*; *&c.* *Secondly*, if the manners are all ſaid to be neceſſary, (paſſing by the contradiction in ſuch a ſuppoſition) when the Being exiſts in *any one* of them, *all the reſt* muſt be *unneceſſary* for that time at leaſt, nay *impoſſible*; ſince a Being cannot exiſt in two different manners at once. Thus the impoſſibility would go round through them all, and this ſuppoſition would make them all as unneceſſary as the former: the neceſſity is but *nominal*. Now ſince there could be no *neceſſary Being* in either of theſe two ſuppoſitions, and yet it is certain that ſome Being exiſts neceſſarily, it follows that the manner of its exiſtence is *one*, *neceſſary*, and *immutable*. And this ſhews, as I concluded before, (N° 5.) that matter is not an uncauſed or neceſſarily exiſtent thing, whoſe manners of exiſtence are ſo *various* and *different*. This principle therefore, *That indifference as to the manner of exiſtence, is inconſiſtent with*

neceſſity of exiſtence, and ſuppoſes another Being to determine it, and of conſequence to give exiſtence to that thing at firſt, ſtands firm; and ought, I think, to be received as an undoubted truth in philoſophy. Let it alſo from hence be remembered, that exiſtence cannot be of a different nature from the manner of it, or from the preſent manner of it; for it hath no other thing to give it a nature, or denomination, or to conſtitute a difference in it, being otherwiſe only a general or abſtract idea. But to go on with the farther conſideration of matter.

VIII. If it was eternal and uncauſed, it received nothing from any other Being, and its nature and properties are ſelf-exiſtent. Now the nature of matter, without which it could not be what it is, and without which it would be nothing to us, is, that it is a ſubſtance *ſolidly extended*, *figured*, *moveable*, *diviſible*. But a ſubſtance *extended* and *figured* is a plain effect, and infers a *cauſe* which thus *extended* and *figured* it; when we ſay a thing is *faſhioned*, *made*, *wrought*, we intimate a cauſe which wrought and faſhioned it after that manner. *Extended*, *figured*, *faſhioned*, *wrought*, are all alike expreſſions of the paſſive form (*e*). How odly would it ſound to ſay a *ſelf-exiſtent houſe*, an *uncauſed pyramid* or *ſtatue?* The abſurdity is not

(*e*) It hath been obſerved here, that this is only *a grammatical argument*. But let it be ſo; it ſhews us that even the propriety of expreſſion leads us into a juſt way of thinking. Let a man ſay, whether it is not literally true of matter, as it is a ſolidly extended ſubſtance, that it is *figured*, *faſhioned*, *wrought*; and if ſo, whether it can be other than an effect, either in *grammar* or *philoſophy?* It would be hard to ſuppoſe theſe two inconſiſtent. Since we have not another way of communicating our thoughts but by language, if there were no propriety *in the expreſſion*, there could be no juſtneſs *in the thought* when communicated. And ſince it has been ſhewn that the *conſtant action* of an immaterial Being conſtitutes the very ſolid extenſion of matter, this juſtifies the propriety of the expreſſion; for it could never have been thus ſolidly extended, or figured at firſt, without the action of *this Being*; *i. e.* it could not have been without a cauſe.

With reſpect to this it hath been farther urged, that "If my expreſſion [matter *is* figured, "extended, placed,] be turned thus, [matter *has* figure, extenſion, place,] the argument va-"niſhes with the form of expreſſing it." But I aſk, Whether the Objector's manner of expreſſion makes *figure*, *extenſion*, *place*, any powers or activities belonging to matter? If they are only *marks of paſſivity* in it, we are juſt where we were before; they muſt ſtill appear *effects*, however diſguiſed by the manner of expreſſion. If it be certain that matter could not exiſt without *figure*, or *extenſion*, or *place*, and yet could not give theſe to itſelf; what are we to conclude? That ſuch *paſſive affections* are *neceſſary* and *ſelf-exiſtent?* Matter could not *have* ſolid extenſion, unleſs an immaterial power were exerted upon it, (ſee N° 1.) it could not therefore *have* figure or place, as being *eternal* and *uncauſed*. If I ſhould ſay, the table I

not leſs, though it be leſs attended to, when we ſuppoſe an *uncauſed* globular particle of matter, a *ſelf-exiſtent* cubical atom. *Figuration* is one of thoſe

write upon is a Subſtance *figured*, and Another contend that it is only a Subſtance having *figure*; would his changing the expreſſion ſhew that the *figure* of the table was *neceſſary* and *ſelf-exiſtent?* The caſes ſeem to be much alike. One might indeed chuſe to ſay, Matter is a ſubſtance having inactivity, inſtead of Matter *is* an inactive Subſtance; but the inactivity of matter would not *vaniſh* with the form of Speech. I ſay, Matter is a *ſolid*, *figured*, *extended* Subſtance; it ſhould be ſhewn then that this expreſſion is improper, or ambiguous; and that it hath led me to make a wrong concluſion; otherwiſe, to find fault with it, is what may be called, *Nodum in ſcirpo quærere:* and to turn it to a form leſs common, and leſs juſt, is endeavouring to perplex a plain caſe.

It is ſtill farther urged on this Head, "That the *location* of matter, or its being in *one place* "rather than another, cannot prove that it doth not exiſt neceſſarily, as I pretend; becauſe neceſſary "exiſtence has relation only to *time*, but not to *place*; or it implies that the thing muſt have "exiſted through all points of time, and for ever, but not in all places and every where." This is the common notion concerning neceſſary exiſtence; but if we conſider what has been ſaid in the two laſt paragraphs, concerning the manner of neceſſary exiſtence, which muſt be itſelf neceſſary, this notion will appear to be only a common prejudice. I ſhall here apply the argument to matter in particular, and endeavour to ſhew that neceſſity of exiſtence hath as much a relation to place as to time.

If we ſay matter exiſts neceſſarily *in general*, but not with reſpect to any *particular place*; ſince *place* is as neceſſary an affection of its exiſtence as *extenſion* itſelf (for *extenſion* cannot be without *place*;) it is as if we ſhould ſay, the extenſion of matter in general is *neceſſary*, but in particular it is only *contingent* or *caſual*; or thus, the exiſtence of matter is neceſſary, but a *neceſſary affection* of that neceſſary exiſtence is only *caſual*. Thus the general and particular exiſtence of matter ſhould have *contrary natures*; or the *exiſtence* of matter, and a *neceſſary affection* of that exiſtence, ſhould have contrary natures. This *affirms* and *denies* the neceſſary exiſtence of matter at once. And there is no avoiding this contradiction, for the objection ſuppoſes matter to *have two different kinds* of exiſtence; it ſuppoſes the exiſtence of matter in general to be *undetermined* by any thing elſe, as it exiſts neceſſarily; but matter muſt *exiſt particularly*, and is not what *Logicians* call an *Univerſale à parte rei*; and therefore its *particular exiſtence* muſt be determined. Now ſince matter can only exiſt particularly, and hath no general exiſtence, it cannot exiſt without being determined by an external cauſe as to place. And ſince its exiſtence hath no *neceſſary relation* to place, *it is not neceſſary*. Here the *Objector* ſuppoſes matter once *determined* as to place, (or once determined in its particular exiſtence) no matter how: and having ſuppoſed this, he contends no determination is neceſſary, and that the argument from *determining its particular location* hath no force to ſhew *that it could not be ſelf-exiſtent*.

The argument which Writers make uſe of to ſhew that matter doth not exiſt neceſſarily, is this: If matter exiſts not neceſſarily in *this* place, it doth not exiſt neceſſarily in *another* place; and therefore it exiſts neceſſarily in *no place*. The ſtrength of this argument would be better perceived perhaps, if it were drawn out at greater length, which may be done in the following manner.

If

thoſe things which unavoidably imply *cauſation*. The conception of matter is not that it is a ſubſtance *figuring* and *extending*; but a ſubſtance *actually figured*, and *impenetrably extended (f)*: and that a ſubſtance ſhould be figured with infinite diverſity, and extended arbitrarily, and yet by nothing, is

If matter exiſts neceſſarily at all, it either exiſts neceſſarily *in no place*; or *in all places*; or laſtly, *in any place* it is ſuppoſed to be in. Theſe are all the ſuppoſitions that can be made, and yet they are all contradictory. As to the *firſt*, if matter be ſaid to exiſt neceſſarily *in no place*, it is denied to exiſt neceſſarily at all. The property which its exiſtence hath in no place, is no property of its exiſtence. The *ſecond*, that matter exiſts neceſſarily *in all places*, is a direct contradiction; for ſince matter (any *particle* of it, or the *whole maſs*) can exiſt but *in one determined place* at once, in all other places it exiſts neither neceſſarily, nor unneceſſarily. Where it exiſts not, its exiſtence hath ſtill no properties. And the *third* ſuppoſition, *viz.* That matter exiſts neceſſarily in whatever place *it is ſuppoſed* to be in, is repugnant in *the very terms*. It cannot be ſaid to be in *any* place, rather than *another*, but by *ſuppoſition*, and at the ſame time it is ſaid to be *neceſſarily* there. What I obſerved juſt before is very evident here; the determination is once ſuppoſed, or matter is once ſuppoſed in a certain determined place; and it is hence inferred that no external determination is neceſſary, or that matter *exiſts neceſſarily* there. If this be not ſo, let the *Objector* aſſign another reaſon, why it ſhould exiſt in any particular and determined place, beſides his own *ſuppoſition*. Let the place it is ſaid to be in, be called A; it exiſts therefore in the place A at the time α; now it was equally poſſible that it might have exiſted in the place B at the time α; or there is no other neceſſity for its exiſting in this place, but an arbitrary ſuppoſition; and another Man might have ſuppoſed with equal reaſon, that it exiſted in the place B, C, or D, at the time α. But to ſuppoſe it exiſting in the place A at the time α, and thence to infer that it exiſts neceſſarily *there* at that time, is as much as to ſay, *My ſuppoſing it to exiſt there makes it neceſſarily exiſt there*. Which ſhews, as has been ſaid, that neceſſity of exiſtence has as much relation to place as to time. And therefore ſince matter is indifferent as to exiſting in any place, it requires an external, or *immaterial* Cauſe to determine its place, or *location*; and ſince it could not exiſt at all, but in ſome place; it requires an *immaterial* Cauſe to determine its exiſtence in ſome place at firſt.

And the ſame kind of argument will be applicable, to ſhew its *indifference* as to being of this or another *figure*; having the parts of its maſs *contiguous*, or *ſeparated*; and if ſeparated, as to having them at this or another *diſtance*. And the ſame reaſoning will alſo ſhew its *indifference* as to being in a ſtate of *reſt* or *motion*, as to having this or another *direction*, this or another degree of velocity; in all which an infinite variety is poſſible. And in ſpite of all evaſions that can be thought on, this argument ſhews that matter is not a *ſelf-exiſtent* or *uncauſed ſubſtance*.

(f) Here it hath been aſked, "If we may not ſay that Space is extended as well as body?" I anſwer, that it cannot be ſaid to be extended in the ſame ſenſe that body or matter is. The idea we have of Space is of extenſion in the abſtract, not of a concrete extended ſubſtance. And this takes off the force of the objection from a ſuppoſed parity. Upon this account Mr. *Locke* chuſes to call it *expanſion*, (Book 2. chap. 15. Sect. 1.) and we conceive it as a thing incapable of *contraction*, *dilatation*, *motion*, *diviſibility*, or *ſeparation of parts*. (See Mr. *Locke*, Book 2. chap. 13.

is the ſame abſurdity as that *there may be an effect without a cauſe*. This argument hath not been hitherto fully conſidered; but it will appear to a reaſonable man, after the exacteſt weighing of things, that the *location* of body rather in this than that place, implies the *act* of ſome Being; that the *figuration* of any particle of matter required an *external cauſe*; and that its *determined quantity* of ſolidity, rather than *more* or *leſs*, could not have been without a *determining principle*. Theſe are the inſeparable characteriſticks of an *effect*; and let us purſue matter as far as we pleaſe, we can never find it diveſted of them. There are not more marks of an effect about *a houſe*, or *a ſtatue*, than can be ſhewn about the *rudeſt piece* of matter; not ſo many, as about the leaſt aſſignable part of it, if we conſider the conſtituent particles of any aſſignable part, and the parts of *a houſe* or *ſtatue*, as ſuch. Why ſhould I allow, if I find a piece of wood *ſhaped*, that this ſhape was given it by ſomething; and if I conſider any other part of matter as having *ſhape*, that this ſhape was given it by nothing?

chap. 13. Sect. 12, 13, 14, 15, 16 and 17.) But chiefly we conceive it as *neceſſary* and *infinite*, incapable of change, and impoſſible to be produced or annihilated. It would be contradictory to ſay, Space is extended *in ſome places only*. The *Carteſians* make matter infinite, to get free of infinite Space: ſo neceſſary is it even in their conception. They ſaw wherever *matter ended, pure Space* would begin; this made them change the *Ariſtotelian* notion, as to the finiteneſs of matter; for *Ariſtotle* both made the world finite, and yet allowed neither *place* nor *emptineſs*, nor *time*, beyond the heaven [Ἅμα δὲ δῆλον ὅτι οὐδὲ τόπος, οὐδὲ κενὸν, οὐδὲ χρόνος ἐστὶν ἔξω τοῦ οὐρανοῦ. De cœlo, lib. 1. cap. 11.] And yet it is to be obſerved, that he did not conſtitute *a pure non-entity*, or negation of all Being, without the mundane limits; but places living, unchangeable, happy, eternal *Beings* there. [Ἀλλ' ἀναλλοίωτα, καὶ ἀπαθῆ, τὴν ἀρίστην ἔχοντα ζωὴν, καὶ τὴν αὐταρκεστάτην, διατελεῖ τὸν ἅπαντα αἰῶνα. Ibid.] It had been abſurd to place a ſmall quantity of matter amidſt an infinite nothing. Thus we ſee what violence men offered to their ideas when they denied Space to be actually infinite. *A Carteſian*, or even an *Ariſtotelian plenum* is as certainly *falſe* as it is true that there is ſuch an affection of body as *motion*. In ſhort, we cannot conceive, without repugnancy, that Space can be taken away, or that it was *ſtretched out* at any certain time, or by a *particular action*: or, contrarily, *that body was placed* rather in one part than another of this neceſſary immenſity, without *the particular act* of ſome Being; or that it was extended thus far only, and no farther, without *the determination* of an external agent. The extenſion of body then implies a particular action exerted, but the extenſion of Space implies no ſuch thing: ſo we cannot truly ſay *Space was extended*, nor apply the term *extended* to both in the ſame ſenſe. I may farther take notice here, that they who make matter neceſſary (all ſorts of *Atheiſts*) ſhould obſerve the great difference between Space and matter in point of neceſſity. Space hath all the true marks of neceſſary extenſion, matter all the contrary. To ſay *once Space was not extended* implies a contradiction; it is *impaſſive*, without *figure, location, diviſion, ſituability, motion*. Two things equally neceſſary, could not have oppoſite affections in reſpect of that very neceſſity.

Or

Or if I find the piece of wood *lying any where*, that it was dropt there, or laid there, by ſomething; and if I conſider any part of matter *as placed*, that it was *laid there*, or *placed there* by nothing? Certainly if we conſider this point cooly, the *figure*, the *quantity*, the *location* of any part of matter, will as readily lead our thoughts to a cauſe of them, *not matter*; as the *dimenſions*, *figure*, *&c.* of a houſe, lead us to a cauſe of them, *not the houſe itſelf.*

IX. Moreover, matter is a thing *moveable*, *diviſible*, *ſituable*, with reſpect to other matter: theſe are all paſſive qualities of matter, no powers in it, but capacities or properties, whereby it is capable of being variouſly affected by *ſome Being* having power thus to *vary* and *modify* it; and all flowing from the nature or primary conception of it. Matter that is not *diviſible*, or *moveable*, or *ſituable* with reſpect to other matter, is not matter at all to us: denying this of it, we deny every thing we conceive concerning it, and quite deſtroy our idea of ſuch a ſubſtance. But to be paſſive implies to be *made* or *effected*. To have *power* and *activity* doth not ſtraight conclude that the Being is not an effect: but to want theſe, and to be *entirely paſſive*, is an argument we may rely upon, that the thing is an *effect* of an active cauſe; otherwiſe it is paſſive for no reaſon, and by no agent, being paſſive by and from nothing. *Paſſivity* can only in the order of nature be conſequent upon *activity*, as much as *effect* can only be conſequent upon *cauſe*; and there is the ſame indiſſoluble connexion between what is *paſſive*, and that *from which it is paſſive* (ſomething active namely) as there is between effect and cauſe. Paſſive and active, truly ſpeaking, are but the juſt epithets of effected and efficient. It is not poſſible to aſſign an inſtance of a thing's being paſſive, but what relates either to its being *produced* at firſt, or having the manner of its exiſtence *changed* by an active cauſe. If indeed it were poſſible that a paſſive ſubſtance ſhould not be the effect of an active cauſe, but uneffected, uncauſed; then there would be no need of any cauſe at all to produce any effect; for effects, or things of a paſſive nature, might be ſelf-exiſtent, which would confound reaſon, and put an end to philoſophy.

X. Againſt this argument from the paſſivity of matter the following difficulty hath been moved. "There ſeems to be this material difference "betwixt a thing's being paſſive in relation to another Being, and a "thing's being an effect of a cauſe, that the firſt as a relation might never "exiſt,

" exist, though the things exist; the other must exist whenever the sub-
" jects exist. A thing may be of a passive nature, and yet never acted
" upon. This relation, if the cause of it is asked, flows from the nature
" and essence of things. May not one argue from a thing's existing of
" an active nature, that the passive Being must necessarily exist in the
" same manner as you do in this place?" To this I answer first, that it is not to be understood how a relation should not exist, if the related things themselves exist; nor how a thing of a passive nature should exist without ever having been acted upon. If *father* and *son* exist, the relation between them must exist: nay, if the *son* alone exists, being a related thing, this as much infers that the *father* existed in the generation, as if both the terms were expressed; since a relation cannot consist in one term. In like manner, a thing of a passive nature is a relative term, and infers a thing different from itself to be the other term of the relation. If a relation flows from the nature of things, it flows from the nature of both the related things. It cannot flow from the nature of one thing only. Relations are as eternal between the ideas in the Divine Mind as any thing else; but even there a relation doth not consist in one idea. And these ideas are the origin of the nature and essence of things. This expression, " a thing may be of a *passive nature* and yet *never acted upon*," passes over the *main point*, and shuffles in another instead of it. It supposes a thing of a passive nature *once existing*, no matter how, but without having been acted upon in the production; and then insists upon a thing possible enough, that afterward it may never have been acted upon in having the manner of its existence changed. But the question here is, Whether a thing of a passive nature could exist without an active nature to produce it at first, or having been passive from something in the production? This is supposed, and the relation, included in the term (*passive*) alledged never to have existed. But waving this, I say *the reason* why we conclude any thing to be an effect at all, is the observing it to want power and action, and yet seeing power and action exerted upon it. This is the *characteristick* of an effect, by which we know it to be an effect, though we were not present at the production of it: and it is the case of matter in particular; and if, notwithstanding this, it may be still self-existent, the distinction of *cause* and *effect* is entirely lost in philosophy, and all reasoning is at an end, as I have said. Surely it can never be right to admit of such a principle as will stop our mouths for ever after, and entirely prevent our reasoning about any thing. Now there is not more power manifested

when matter hath the manner of its exiſtence changed, by motion to wit, which is confeſſedly allowed to be an effect, than is manifeſted in it conſidered without any change in the manner of its exiſtence; that is, by the terms, than is manifeſted in the mere production of it. *Any finite particle* of matter in this caſe may be conſidered as *a large ſyſtem*, where numberleſs things are done: the figure of every part of it is determined, and that to *an indefinite minuteneſs*; the relative ſituation of all theſe *numberleſs under parts* is determined, and neceſſarily to be ſuppoſed determined in the very firſt production; the quantity of ſolid extenſion is determined: the indifference in all thoſe particulars that were mentioned in N° 5. is determined to one certain circumſtance out of millions of others equally poſſible, by ſomething. I add then, There is not by far ſo much power manifeſted when matter hath the manner of its exiſtence changed, (by motion) as is manifeſted in the ſimple exiſtence of it. And could this thing exiſt without power exerted; that is, without an *active cauſe*; that is, without having been *paſſive* in the very production? Obſerve, It is contradictory to ſay matter exerted this power itſelf: allowing that now it has power, this is a power exerted previous to its having any; it is a power exerted in order to its *very exiſtence:* it could not exert a power before it exiſted. And ſince matter itſelf is not this *determining*, this *operating*, this *powerful Principle*, is not the exiſtence of *an immaterial Being* neceſſary, to give it its firſt exiſtence? Can a figure be determined both in *magnitude* and *kind*, and yet by nothing? Muſt not then this *paſſive thing* have been *acted upon* in the very production of it? From a philoſophical ſurvey of the nature of matter we can never draw this inference, "That a thing may be of a *paſſive nature*, and yet never have been "*acted upon.*" Matter is not barely ſituable, but really *ſituated*, which requires a particular act. Thus ſituation implies not only the paſſive capacity, but that it hath actually *been paſſive*, from another thing, or acted upon: and this relation muſt have exiſted as ſoon as matter exiſted. The ſame is to be ſaid in other reſpects; matter is not only figurable and extendible, but *de facto figured* and *extended*. It is not poſſible here (which I beg may be attended to) to conceive the ſimple paſſive capacity, without the relative act exerted. So much doth a near inſpection of the nature of matter ſhew it to be *an effect*, that we could have no notion of it at all without the idea of the act implied, whereby it was produced. No man could have the idea of a ſubſtance ſituable, figurable, or extendible, which had not already *ſome ſituation*, *ſome figure*, and *a determined extenſion:* he

cannot conceive it exiſting without theſe; nor produced firſt, and receiving theſe determinations afterward. As to the queſtion that is put, "If one may not argue from the exiſtence of an *active nature*, that the "*paſſive Being* muſt neceſſarily exiſt, in the ſame manner as I do in "this place?" I anſwer, By no means. I argue from the paſſive nature of matter, that it muſt have been produced by an active Being, and therefore have begun to be: but an active Being doth not require a *paſſive nature* to be the cauſe of it, (that is repugnant) as the dead or paſſive ſubſtance requires an active Being to be its cauſe. A dead ſubſtance doth not only want an active Being to act upon it before the manner of its exiſtence can be changed; but to produce it at firſt; in which caſe there is no arguing converſly. Perhaps ſomething farther may be intended in this objection; if any ſuch thing be, what the reader will meet with towards the end of this Section, will furniſh him with a ſufficient reply to it.

XI. It is obſervable that this argument *from the paſſivity of matter* concludes in few words, from what has been ſaid in N° 6 and 7. If a ſelf-exiſtent Being could not have depended on another Being for the *manner* or *mode* of its ſelf-exiſtence, that manner of ſelf-exiſtence could not have been changed at any time by another Being; for it muſt be equally ſelf-exiſtent at all times. If it depended for the manner of its exiſtence on any Being, it muſt have depended for its exiſtence itſelf on that Being; ſince exiſtence is not of a different nature from the manner of it (N° 7.) And therefore it could not have been paſſive from another Being, ſo as to have the manner of its ſelf-exiſtence changed: it could never have been ſo much as capable of this. Therefore, *converſly*, a Being that is capable of having the manner of its exiſtence changed, or of being thus far paſſive from another Being, cannot be uncauſed, or ſelf-exiſtent; and therefore matter cannot be ſuch (g). From this, and what has been ſaid in N° 7.

(g) From what is ſaid here, the anſwer to the laſt part of the difficulty in the Note at (d) is plain. It was ſaid there that it ſeems poſſible, "that a thing which hath exiſted from eternity "may be annihilated, by a Being endued with the requiſite powers." But an eternal, uncauſed thing muſt be *ſelf-exiſtent*, by N° 4. and by this N° 11. the manner of its ſelf-exiſtence *cannot be changed*, nor therefore taken from it; nor therefore can its exiſtence itſelf be taken from it; that is, it cannot be annihilated. A ſelf-exiſtent Being was ſecured (*à parte ante* eternally) from ſuch contingency: no other Being (ſuppoſing another) could thus affect a ſelf-exiſtent nature. And it is abſurd to ſuppoſe that a Being might *riſe up in time*, which ſhould

N° 7. it follows eaſily, and is to be marked as a conſequence, *That the manner of ſelf-exiſtence muſt be immutable*; and that a ſelf-exiſtent Being can have no *accidents*, or things *not neceſſary* in it. And that there muſt be ſuch a *ſelf-exiſtent Being*, *immaterial*, the *cauſe* and *author* of matter, is now evident, if what has been ſaid in this and the former Sections be duly conſidered.

XII. It will be to no purpoſe, in order to elude the reaſoning above, to ſay *Matter was extended and figured eternally and without beginning*, ſo that we are not to enquire *how*, or *when*, or by *whom*. This is to ſay it was extended, without being extended *at any time*; or figured, without being figured *by any cauſe:* it is to allow it to be *an effect*, and at the ſame time to deny it had *a cauſe*, in denying that ever it was thus *paſſive* from any thing, or at any time. In ſhort, it is to bid us ſhut our eyes, and make no farther enquiry, but allow matter to be an *eternal paſſive lump*. If we ſay a thing was done, and *at no time*, we deny that it was done: in the ſame manner, if we ſay an effect was performed and *by no cauſe*, we deny it to be an effect. To ſay matter was eternally figured, or extended, is an *affected*, *unintelligible* expreſſion, which, attentively conſidered, grows into a contradiction; for *any thing done*, as matter figured, extended, *&c.* as a thing done, muſt partake of the common affections of *time*, *place*, and a *cauſe*; inſomuch that if we deny any of theſe inſeparable affections concerning the thing done, we deny the thing itſelf to be done. Matter ex-

have this power over it. What was a contradiction from eternity, muſt be a contradiction to eternity; becauſe a contradiction can never become poſſible. It is a begging the queſtion, to ſuppoſe any Being may be endued with the requiſite powers to perform ſuch an effect: It is as if I ſhould ſay, A *circle* and *ſquare* may be made to co-incide in all their points, by a Being endued with the requiſite powers. It is a mighty unphiloſophical prejudice to cloath a ſelf-exiſtent Being with all the *marks of contingency* in our imagination; and yet this taken the contrary way makes us think it ſo eaſy, as is inſinuated in this objection, for a *contingent thing* to be ſelf-exiſtent. We make the tranſition from the one to the other a mere trifle; though their difference is ſo great, that it cannot be illuſtrated by any compariſon the wit of man can invent: neceſſary exiſtence is infinitely higher above contingent exiſtence, than contingent exiſtence is above utter non-exiſtence. In ſhort, this whole objection taken together amounts to the following plain abſurdity. *A Being endued with the requiſite powers may make matter either a neceſſarily exiſtent thing, or a contingent thing:* for either of theſe two cannot be equally poſſible in the nature of matter itſelf, as is ſuppoſed, unleſs it be poſſible to ſome Being. I am the more expreſs here that I may awake men to a due ſenſe of the infinite difference of theſe two natures.

tended,

tended, and yet by *no cauſe*, and at *no time*, or *no where*, is matter not extended, *no matter*.

XIII. And for this reaſon that a thing done muſt be done in ſome time, matter cannot be *an eternal effect* of an eternal cauſe, which is the ſecond hypotheſis I mentioned, by which ſome Philoſophers have endeavoured to maintain the eternity of matter. This is ſtill an affected unintelligible expreſſion. The ſuppoſing an *action*, ſuch as the effecting of matter muſt be, deſtroys the idea of eternity in *the thing effected* by that action. Every action muſt have a *beginning* and an *end*, theſe are included in the conception of action; for if it were without a beginning, the thing is not yet begun, or never was begun; and what was never begun cannot be now ended, as the production of matter is. The denying *theſe limits* to action, amounts ſtill to an abſolute negation of it. And to ſay matter was produced without action, is as much as to ſay, it was effected without *agency* or *efficiency*. It will be ſaid, *God* is eternal, and naturally active; therefore an action may be eternal: for the *Philoſophers* who ſay matter is an *eternal effect*, are not *Atheiſts*. But though it be certain that the *Agent* is eternal, it will never follow that any *particular act* is eternal. It is the nature of any particular act to be *circumſcribed* and *temporary*, that is, in other words, to be limited both *before* and *behind*, which is a condition inconſiſtent with eternity. Upon this account it is to no purpoſe to endeavour to *entangle* the preſent queſtion, and then *to loſe* it among the *perplexities* concerning a *ſucceſſive eternity*: for, whatever may be in that, when men contend that the eternity of a Being is made up of finite parts of duration, all ſucceeding one another, they are far from ſuppoſing that any part can be the firſt part; that would ruin their concluſion. Whereas here we are forced to conceive that an *effect* muſt receive exiſtence by a *particular act*, and therefore to have a *firſt part*, or *beginning* of its ſucceſſive duration; and this hypotheſis aſſerts matter to be an effect. If this be well attended to, it will readily prevent a reply. And indeed if men would ſpeak nothing but what they underſtand, and have ideas of, it is not conceivable what can be replied. For,

XIV. It is certain, by what is ſaid above, that *ſome other Being* determined the *manner* of matter's exiſtence at firſt, and therefore *the exiſtence itſelf*, or gave it exiſtence, ſince exiſtence without a manner is impoſſible. Now let a man anſwer it to his own underſtanding, if when matter *got*

exiſtence, that doth not plainly imply that it *had it not before it got it.* And if it ever was without exiſtence, whether its exiſtence can be eternal. It appears to me, that to ſay, an effect may be eternal, is the ſame as to ſay, a thing which had a beginning may want *a commencement.* It is of no conſequence how far back we carry *this beginning* in our imagination, provided the conception of it adheres neceſſarily to matter, as it hath been ſhewn to do. The carrying a limit farther back will never make it *no limit.* Again, let this *antitheſis* be taken notice of. It is the nature of a ſelf-exiſtent cauſe never *not to exiſt*; and it is the nature of matter, an effect *ex hypotheſi*, to begin to exiſt. What concluſion are we to draw from this? Will it ever follow from it that, Therefore theſe two are *co-eval*, equal as to eternity? Here is not only a priority *of nature*, but *of exiſtence*, or time; which I deſire may be conſidered *(h)*.

(h) It hath been urged here, "That it is not yet made ſufficiently evident that a Being "acting from eternity, may not always have acted in a particular manner on a ſubject; "and conſequently, may not alſo have produced the ſubject of its action in all time, or from "eternity." But to this I reply, that this itſelf is a very dark unintelligible notion, and what no body, I think, can have a clear conception of, that a particular act, ſuch as the production of *any finite particle* of matter may be ſpun out into an eternal duration, as if infinite power were employed *negatively*, or in *delaying* the effect; for ſo I preſume we muſt conceive, if infinite power was always acting in producing the leaſt aſſignable atom of matter: and in this argument, whatever agrees to any the leaſt aſſignable particle, agrees to the whole maſs, which certainly is not infinite. I mean, it muſt be ſaid that every particle of matter muſt have been a-producing in all time, or from eternity; for if it was temporary, the production of a finite maſs could be but temporary. And even though the whole maſs were infinite, yet unleſs every the ſmalleſt atom of it was a-creating through eternity, any finite portion of that maſs, *our earth*, for inſtance, would ſtill be but temporary, as conſiſting of parts that did not take up an infinite time in the making. And the reaſoning is the ſame with reſpect to the *ſun*, *moon*, *&c.* And the inhabitants of any other *ſyſtem*, if ſuch there are, might ſtill with reaſon conclude, that their ſyſtem alſo was temporary: and ſo of others. Nor doth the difficulty end here; for as any aſſignable part conſiſts of numberleſs other parts, by the ſame kind of reaſoning, we muſt at length be forced to ſay, that *any infinitely little part was the work of Omnipotence through eternity:* for there will be all the ſame arguing about the leaſt finite part as about the greateſt. Beſides, it is to be obſerved, that to ſuppoſe a ſubject *eternally pre-exiſting*, as is here done, is no reaſon to infer that a ſubject may be eternal in the production, or before it be made to exiſt. Not to mention that to ſuppoſe a *paſſive ſubject* eternally pre-exiſting is equal to a tacit begging the queſtion that matter is eternal without any production; *contra demonſtrata*, if the arguments in the firſt part of the Section be right.

XV. It

XV. It was a hankering after the eternal atoms of *Democritus* and *Epicurus*, and that they might get matter ſome way or other allowed to be eternal, which made ſome *Platoniſts* contrive ſuch evaſions, contrary to *Plato*'s own ſentiments. He himſelf ſaid, " God made the world *viſible* and *in-* " *viſible*, out of no pre-exiſting ſubject; and that his *will alone* was ſuffi- " cient for the exiſtence of things (*i*)." Where, by the way, it is very obvious, that *what is made out of nothing* cannot be eternal: for it did not exiſt, or was not effected, when as yet it was nothing, ſo to expreſs it, or as long as it was nothing. And there is *no medium* between having been *once nothing*, and *eternally ſomething*: that is, we cannot join theſe two together, and make *a compounded*, or *third nature* out of them; ſuch a thing, to wit, as ſhould have been *once nothing*, as being effected, and yet *eternal*; and every one muſt perceive that the preſent ſcheme ſuppoſes theſe two inconſiſtent things joined together. The followers of *Plato* did not agree among themſelves. Some of them made matter eternal without being an effect, a *ſiſter-ſubſtance* to the *Deity*, ἀγένητον ᾗ ἀδελφὴν ὑσίαν (*k*), as if the loweſt Being went as high in the higheſt perfection of *ſelf-exiſtence*, as the *ſupreme* Being. Their manner of explaining this is worth obſerving. They ſaid, " God was not *able* or *ſufficient* of himſelf to make a world, but " uſed the *co-operation* [συνεργία] of eternal matter; and that, all things " exiſting virtually in matter beforehand, he only delineated, ſhaped " and wrought them off, out of the common maſs, and from their ori- " ginal rude form (*l*)." They indeed excluded *Epicurus*'s chance; but they

(*i*) Καὶ κατὰ Πλάτωνα Θεὸν αὐτῇ προϋφίστησιν ἡ σκέψις, πάσης ἐμφανοῦς τε καὶ ἀφανοῦς δημιουργὸν διακοσμήσεως, ἣν ἐκ μηδενὸς φησιν ὑποκειμένης προαγαγεῖν τὸν τεχνίτην· ἀρκεῖν γὰρ αὐτῷ εἰς ὑπόστασιν τῶν ὄντων τὸ βούλημα. Hierocl. de Providentia & fato, ex Photii Bibliotheca.

(*k*) Ibid.

(*l*) Καὶ τί, φησὶ, καταλέγω σοι τούτους, ὅπου γε καὶ τῶν Πλατωνικῶν τινες ἐκ ὀρθὴν τὴν περὶ τῆς δημιουργῆς Θεῖς διασώζουσιν ἔννοιαν; ὁ γὰρ ἱκανὸν αὐτὸν εἶναι φήθησαν αὐτοτελῶς ὑποῆσαι δύνασθαι κόσμον οἰκεῖα δυνάμει καὶ σοφίᾳ ἐξ ἀϊδίς ἐνεργοῦντα. ἀλλ' ἀγενήτε ὕλης συνεργίας, καὶ τῇ μὴ παρ' αὐτῷ ὑποστάσῃ φύσει καταχρώμενον μόνως δημιουργῶν δύνασθαι· πάντων μὲν δυνάμει προϋποκειμένων ἐν τῇ, λεγομένῃ ὕλῃ. αὐτῇ δὲ οἱονεὶ διαζωγραφοῦντος αὐτὰ, καὶ τάττοντος μόνον, καὶ διακρίνοντος (μόνον) ἐκ τῆς ὑλικῆς σχήματος. Ibid.

Here, if we conſider what hath been proved before, *viz.* that it is the power of the Deity exerted, which conſtitutes the very ſolid nature of matter; it muſt appear a direct contradiction to ſay *any thing exiſted* virtually in it. One would almoſt think theſe *Philoſophers* had been *Carpenters* by trade, and had confined the *Deity* to their own manner of working;

they made a dead ſubſtance as neceſſary as a living Being in the nature of things: as if *ſelf-exiſtent deadneſs* muſt have contributed *its help* to ſelf-exiſtent Power, before a world could be formed. At this rate the *negation of every perfection* might be made a *ſelf-exiſting thing*; and there might be an eternal neceſſity of *imperfection*, as well as of perfection in nature! They imagined infinite power could not produce a certain effect; therefore they kindly aſſiſted it out of their own fancy, by ſuppoſing the effect already performed, and all the difficulty over. What can be eaſier? It is juſt ſuch an argument as if we ſhould contend, that no Being could *cut* and *form* the parts of a watch, though it might ſet them together, if we ſuppoſe them *eternally pre-exiſting:* and therefore *the parts pre-exiſted eternally!* The *ſelf-exiſtence* of a dead inactive ſubſtance is as great an abſurdity, when we ſuppoſe the Deity to co-exiſt with it, as if we denied him, or rather greater; becauſe then we allow the exiſtence of a *Powerful Cauſe*, which we deny on the other hypotheſis. And, as hath been ſaid above, there is as much power actually exerted, be it by what it will, before the rudeſt piece of matter could be made ſimply to exiſt, as could be exerted in changing the manner of its exiſtence: and that it ſhould be exerted, and by nothing too is ſtrange. We allow that a power muſt be actually exerted to move the particle A from B to C, or along the line B C: but the *intelligent Reader* will never deny, that it requires power to place it at B firſt, and to *determine* all thoſe things likewiſe in its ſimple exiſtence, which I have ſhewn are to be determined.

XVI. The other ſort of *Platoniſts* allowed *God* to have made the world, both as to *form* and *ſubſtance*; but yet ſo as that it proceeded from a neceſſity of his nature, and was a conſequence παρακολούθημα, of it (*m*): or ſo that he had no priority of exiſtence before his own effect,

ing; at leaſt their whole deſcription favours of the *loweſt Mechanick*. If matter be utterly inactive, how can it *co-operate?* What hath no ἐνέργεια, can never afford συνεργία or aſſiſtance to another Being.

(*m*) Καὶ ἐι βάλει, παραδείγματί σέ τινι τῶν γνωρίμων ξεναγήσω πρὸς τὸ ζητούμενον· φασὶ γὰρ ὅτι καθάπερ αἴτιον τὸ σῶμα τῆς ἐκάστε σκιᾶς γίνεται· ὁμόχρονος δὲ τῷ σώματι ἡ σκιὰ, καὶ ἐκ ὁμοτίμως· ἔτω δὲ καὶ ὅδε ὁ κόσμος παρακολούθημά ἐσι τῦ Θεῦ, αἰτίᾳ ὄντος αὐτῷ τῦ εἶναι, καὶ συναϊδίος ἐσι τῷ Θεῷ, ὑκέτι δὲ ὁμοτίμως. Zachariæ Scholiaſt. as cited by Dr. *Clarke*. Another of theſe compariſons is to be found in the ſame place from S. *Auguſtin*. *Sicut enim inquiunt:* [*Platonici*] *ſi pes ex æternitate ſemper fuiſſet in pulvere, ſempertti ſubeſſet veſtigium, &c.*

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which therefore had no beginning in time (*n*). But if God created matter by a neceſſity of nature, he could never *not create it*; for, as hath been ſhewn, there is no mutability in his nature, and this neceſſity muſt always remain: or God muſt create matter *conſtantly* as well as *neceſſarily*. Shall we think that he created an infinity of it; and that (no more after that being poſſible) he is forced to annihilate ſome part again, that he may anſwer the neceſſity of creating? ſomething like this muſt be ſuppoſed on their ſcheme. And if, on the other hand, *it were poſſible* he ſhould produce matter *in time only*; then it was poſſible too that matter ſhould not be eternal: and if it were poſſible it ſhould not be eternal, by what argument can a man ſhew that it was *really eternal?* They who would defend the eternity of matter, muſt at any rate ſtick to the impoſſibility of its being otherwiſe, or that God produced it neceſſarily. And indeed, theſe men have endeavoured to explain themſelves by compariſons that ſhew they had this notion of the *Deity*. "As the "*Sun*, (ſay they) if it had eternally exiſted, would have eternally *pro-*"*duced light*, or an *opaque body* a *ſhadow*, or a *foot* a *footſtep*; ſo the "material world is an *eternal production*, or *conſequence* of God who is "eternal." It is eaſy to obſerve here firſt, that the *ſun*, the *body*, or the *foot*, are not *efficient cauſes* producing an action of themſelves, but things of a paſſive and neceſſary nature, which *another Agent* uſes as *inſtruments* to produce the effect. A foot, *v. gr.* is but the inſtrument or thing, whereby a *free Agent* (man) produces the *print* or *veſtige:* And to ſay, "If a man had eternally produced the impreſſion of his *foot* in *ſand*, "or the ſignature of a *ſeal* in *wax*, it would have been an eternal "effect," is no proof or illuſtration of the thing intended to be cleared up by the compariſon, but a bare ſuppoſition of it in other words. The production of an impreſſion in wax or ſand is an action, and implies the limits of a beginning and an end; for it cannot be conceived that any one ſhould be eternally a-putting on an impreſſion, without

(*n*) *Qui autem à Deo quidem factum fatentur mundum, non tamen eum volunt* temporis *habere ſed* ſuæ creationis *initium; ut modo quodam vix intelligibili, ſemper ſit factus.* Ibid. ab eod. Here how could the world, if it had a *beginning of creation*, be without a beginning of time? This is *ſcarce intelligible* indeed, or rather *plainly contradictory*. But though *Philoſophers* of all men are obliged to ſpeak nothing except what they underſtand, and conceive poſſible; yet they are the only men in the world perhaps, who have ſpoke the greateſt nonſenſe; inſomuch that there is ſcarce any thing ſo abſurd, which ſome or other of them have not maintained.

having at any time really put it on. The ſame may be ſaid concerning the *Sun* producing light, or an *opaque body* hindering the progreſs of it: ſince theſe are *neceſſary things*, and not *free Agents*, it is the ſame as to ſay, if ſome Being had from eternity given that property to the *Sun*, whereby it *emits light*, or that property to *another body*, whereby it *caſts a ſhade*; then light would have been *eternally produced*, and a ſhade *eternally projected:* which ſuppoſes the thing in queſtion, but no way ſhews how it is poſſible. All theſe examples prepoſterouſly ſuppoſe the *unaffected eternity* of matter in ſome circumſtance or other, in order to ſhew that it might have had an *affected eternity*, ſo to ſpeak; which is, I conceive, to ſuppoſe one abſurdity, in order to prove another. Beſides, they change the queſtion to this, Whether *God* be a *free Being*, or a *neceſſary Agent*, as it is called; though any *Being*, ſo far as it is determined by a *phyſical neceſſity*, is rather a *patient* than an *agent*, being paſſive from that thing which impoſes the neceſſity. To make their compariſons ſuit the deſign, it ought to follow, that it is the nature of God to create matter, as neceſſarily as it is of the Sun to emit light, which cannot *not do it.*

XVII. But to be a little more particular concerning neceſſity. To be determined then by a phyſical neceſſity is a *mark* of a *dependent nature*; as here in the *ſun*, or *opaque body* (*o*): and the dependence is upon the *Being impoſing that neceſſity*. Now to extend this kind of neceſſity over the *firſt* and *ſupreme Being*, implies juſt this contradiction, That there is ſome Being *prior* to the *firſt*, or *ſuperior* to the *Supreme*. This Being impoſes a phy-

(*o*) Here this queſtion hath been put, "Do not thoſe neceſſary effects, which have been "aſcribed to the Sun and opaque body, ariſe from their Nature? And why is it more a mark "of dependence in them, than in a triangle to have its angles equal to ſuch a ſum?" But I anſwer, There is no parity between the two inſtances adduced. That the three angles of a triangle ſhould be equal to two right angles is an *eternal truth* which obtains by an *abſolute* or *metaphyſical* neceſſity, and doth not concern any thing of *exiſtence:* and *truth* is none of thoſe things that can become *dependent*, or be *created*, or *made*. How abſurd would it ſound to ſpeak of *creating truth*, or making *more truth exiſt?* The *ſun* or *opaque body* contrarily, are *ſubſtances exiſting*, capable at leaſt of being made or created, and but ſimply poſſible in idea, not abſolutely or eternally neceſſary. Thus they cannot be other than dependent. That a *body* ſhould *emit* light, or *reflect* it, rather than *tranſmit* it, is a poſitive inſtitution of ſome Being ſo ordering it; and therefore a mark of dependence, as I aſſert. There would be no propriety in ſaying *A mathematical truth is a depending thing*. In ſhort, we muſt diſtinguiſh between ideas that were eternally and neceſſarily connected in an *infinite Mind*, for theſe make eternal and abſolute truths; and ideas that were but only barely compatible in it eternally, which conſtitute the natures of all created ſubſtances.

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sical necessity on all inanimate things in nature: that is, as we have seen in the second Section above, *really acts upon them*; so that the action which we think we discover in them, is his immediate action. *This action* discovering itself several ways in the several bodies of the *universe*, and always uniformly and regularly, is termed *necessity* in them, as in a stone falling downward; and called, with respect to the uniform constancy of it, by Philosophers, *the law of their nature.* And it is from these instances only, that we get a notion of physical necessity; which I wish might be attended to. But men getting the first notion of it thus, and then extending it over the *supreme Being himself*, proceeded contradictorily, imagining there was still some superior nature above the Supreme: which was to make a *chimera*, a contradictory creature of the fancy, the *supreme*, or rather *supremest Cause* (*p*).

XVIII.

(*p*) When *Cynicus* confutes *Jupiter* in *Lucian*, and makes him a *Drudge* to *fate*, insisting that fate performs all, he adds these remarkable words: Οἶσθ' οὐδὲ τὴν εἱμαρμένην τιμῶντες ἄν, εἰ δέον αὐτὸ ἔπραττον· οὐ γὰρ οἷμαι δύνατον ἦδε αὐτὰς ἔτι ταῖς μοίραις ἀλλάξαι καὶ μεταθεῖναί τι τῶν ἐξ ἀρχῆς δοξάντων περὶ ἑκάστου. This wonderfully exposes a chimerical necessity, and shews the absurdity of our prejudice, though contrary to the *Author's design*. *Jupiter* is a *slave* to the *Destinies*: the *Destinies* themselves can change nothing in *those decrees* that were *originally established* about every thing. *What Being* was it then which established these *unalterable decrees?* That indeed is the secret. It is an *empty* and *unsupported necessity*; something which is *nothing*, which tyrannizes over all things. Let an *Admirer* of *fatal necessity* solve this *Riddle*.

This argument will perhaps force him to say, that this fatal necessity is in the nature of the supreme Being himself, without running higher for it: and, I think, this is what the modern Scepticks generally hint at now, and mean, though perhaps they do not speak out. But let them explain why there should be a *necessity of imperfection* in a necessarily existing Being, that is, in the perfectest Being? To admit of a *mixture* of perfection and imperfection, and then to assign the limits of each, will confound all their philosophy. There is certainly *a necessity of perfection* in such a Being: and to say there is likewise *a necessity of imperfection* in him, is to say there are two *absolute opposite necessities* in him, which would destroy each other; and this would leave no necessity of perfection in him at all. This looks like direct Atheism: and certainly the admitting a *contrariety* and *opposition* in the nature of the *supreme Being* will always end in Atheism. As I argued above with respect to existence, so I may argue here. There is a *necessity* of *some perfection* undoubtedly; otherwise there would have been a necessity of *universal* and *eternal imperfection*; and then *no perfection* could have been *so much as possible*. And if there be *a necessity of any perfection*, it must be *a necessity of infinite perfection*; because there could not be two *opposite necessities*, both of perfection, and its contrary; and because imperfection, *being a negation*, is not a thing of which *necessity* or *eternity* can be predicated of, any more than of nothing. Thus a necessarily existing Being is *necessarily infinitely perfect*. Let us consider how *acting by a physical necessity* agrees with this. To act by a physical ne-

XVIII. On the other hand, to call this neceſſity of creating matter, *a moral neceſſity*, ſuch, to wit, as determines the *Agent* to act, from the conſideration of what is wiſeſt and beſt to be done, ſuppoſes that they who affirm *God* to have been under this neceſſity, can aſſign the wiſe conſideration which determined him to produce this eternal effect: *can aſſign* the reaſon, I ſay; otherwiſe the aſſertion muſt turn to *ſuppoſition* only and *conjecture:* beſides, it is unphiloſophical to ſuppoſe that moral neceſſity

ceſſity implies a *phyſical impotence* of acting otherwiſe: for if God had a phyſical power to act otherwiſe, he could only be under a *moral neceſſity* of acting as he doth, of creating matter, or doing any other action. Now *this phyſical impotence* will run through *every part of the contrivance* of the material world; if it be not abſurd to ſpeak of *contrivance* on this hypotheſis, but rather proper to call it a *fatal* and *neceſſary conſtitution*. For example, God could not have made the *earth* to turn round on its axis in a *ſhorter* or *longer time* than it doth; effecting the preſent motion by a phyſical neceſſity, *i. e.* wanting power to have done otherwiſe; and the length of our νυχθήμερον muſt be a thing as neceſſary and immutable as the truth of any one of *Euclid*'s *propoſitions*. This the *Fataliſts* cannot get over. He could not have created *one atom more* or *leſs* of matter than he hath done; this proceeding likewiſe from a neceſſity of nature: unleſs it ſhould be ſaid, as above, that he creates it conſtantly from this neceſſity, not having power to abſtain. He could not have given any atom *another degree of velocity*, nor altered *the direction of its motion* in the leaſt. Every thing in nature is an example of this. Suppoſing the number of hairs on a man's head to be n, he could not have cauſed that this number ſhould be $n+1$, or $n-1$. The reſult of all is, It ſhould imply a *phyſical contradiction*, that any thing in nature ſhould have been otherwiſe than it is; ſince the *greateſt power poſſible* was not able to effect any the leaſt deviation: and that is again, Every thing *is as it is*, by a natural, inevitable fate. This is the concluſion as fair as I am able to draw it. Now if this be ſo, why need we any longer own a *nominal Deity?* I find no difference between this and the *rankeſt Atheiſm*. Here is *a fatal neceſſity ſupreme*, and the Deity ſtill the *Drudge* of *all-performing deſtiny*. What is it to us whether things fall out by *blind chance*, or come to paſs by *rigid, unalterable fate?* If what goes under the name of the perfecteſt Being can have no liberty, we can have none. On either ſcheme we have nothing to *hope* or *fear*.——Compare this now with that kind of neceſſity which I juſt now ſhewed muſt belong to an infinitely perfect Being. Hence let it be obſerved, that to give the Deity power without liberty, is to take away every reaſon we can have to own him, or to wiſh that he were: ſuch a Deity ſerves the Atheiſt's turn as well as chance itſelf. But let it be remarked here, that this ſcheme of making the Deity act by a phyſical neceſſity is repugnant to itſelf. For upon this hypotheſis it would be contradictory for any of the heavenly Bodies, to move with a leſs degree of velocity than they do, the Deity being phyſically impotent to effect this: and yet even this is a contradiction, that a Being who is able to do more, ſhould not have the phyſical power to do that which is leſs. As if it were ſaid, a man who hath ſtrength to raiſe a certain weight, would not be able to liſt the half of it. So much is the Deity but a name for fatal neceſſity upon this ſcheme!

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can determine an *Agent* to do what we muſt look upon as a phyſical contradiction, unleſs we could form a conſiſtent idea of an *eternal action* having both *beginning* and *end*. The only moral motive which, I think, can be alledged, why God ſhould have created the world from eternity is, *that he might have communicated happineſs and perfection to rational creatures as ſoon as poſſible.* But we cannot conceive even this, without allowing him a *priority of time*, or to have been pre-exiſtent to his own effects. And if we allow him a *priority*, that by itſelf cannot be leſs than an *eternity*: otherwiſe two limited periods muſt make up his eternity. Not to mention that, if we may ſpeak of the reaſonableneſs of an *earlier* or *later* exiſtence, creatures that were to enjoy an eternity of exiſtence *à parte poſt*, as it is called, have no reaſon to complain that they were not ſooner created. *Mathematicians* allow that lines *infinite* or *endleſs* one way, are equal, whatever difference there may be on their finite extremes; and this ſuppoſition agrees with the exactneſs of demonſtration: and we find *Lucretius* on his ſcheme, comforting thoſe who are to die firſt, by telling them that the eternity of non-exiſtence which they have before them, will be no longer than theirs who are to be born ages after. And this is applicable the other way. They who are born lateſt, have ſtill an eternal duration before them. Beſides that ſuch creatures before they exiſt can complain of nothing, ſince they are not in the *predicament* of Being: a *non-ens* is capable neither of good or bad treatment. At this rate we might complain that we were not all born *at once*, nay that we were not all *eternal*, as eternal as *God*, *ſelf-exiſtent*. What abſurdities may we not inſiſt on, if we allow ourſelves to proceed in this manner *(q)*? Upon the whole then, *reaſon* neither admits of matter's being eternally created, nor can

(q) Men who affect the height of *free-thinking*, and know not what it is, are even capable of entering ſuch complaints as theſe here mentioned, in order to ſhew that the conſtitution of things is wrong "*Can any bounds be ſet to deſire* (ſays one); may not I wiſh to be as *wiſe*, "as *powerful*, as *happy*, as any Being elſe is; *infinitely perfect?* Why am I made capable *of* "*deſiring* what I am not capable *of attaining?*" *Free-thinking* is certainly a good thing *if it be rational*: but if it exceed the bounds of reaſon, it of courſe becomes *abſurd thinking*. If one would put the Queſtion, *May not I deſire what is abſurd, a contradiction?* He would ſee what anſwer *it required*; namely, that he ſhould deſire *to be rational* in the firſt place. That all Beings ſhould be equally powerful, happy, perfect, is the wildeſt abſurdity. The *conſtitution of things* is not wrong, but ſuch deſire fooliſh and inconſiſtent. We cannot help, it is true, deſiring to be as happy as poſſible: but our chief deſire in order to this ſhould be, *That things may have been conſtituted by infinite wiſdom and goodneſs.* And if ſo, our wiſhes are prevented. Man will certainly be as happy as poſſibility and reaſon can permit. Would he have *reaſon* to give way,

can either *phyſical* or *moral neceſſity* be alledged why it ſhould be ſo; and an eternal effect, though now become a *philoſophical term*, will nevertheleſs be an eternal contradiction (*r*).

XIX. Having

or *impoſſibility* to take place, to gratify his abſurdity? Since free-thinking came to be in vogue, we run to it from a miſtaken conceit, as if it were to *free us from all reſtraint, a permiſſion to talk licentiouſly of every thing.* But on the contrary, *it ties us down to the ſeverity of eternal reaſon.* To be free from reaſon is the greateſt *ſlavery*, which we ignorantly affect. It is not free-thinking to *pull down every thing*, and *build up nothing.* That would be making war upon *all the principles* of action and *reaſon* itſelf.

(*r*) Mr. *Leibnitz* has contended that God could not have created the material world *leſs than infinite*, not having a *ſufficient reaſon* to determine in what part of infinite Space a finite maſs of matter was to be placed. But upon the ſame account it might be contended, that he could not have made it *other than eternal*, not having a *ſufficient reaſon* to determine in what period of eternity, (if I may ſo ſpeak) it was to commence. And then we have an *eternal* as well as *infinite creation*, from the force of this principle; which is a contradiction in terms, if by creation be meant a thing's getting exiſtence which had it not before; and if it always had exiſtence it could not be created. Examples of this ſort are numberleſs: Of two *ſimilar*, *equal* and *ſolid particles* of matter, and Dr. *Clarke* ſhews there muſt be numberleſs ſuch particles, unleſs we will ſay that matter is all pores without any ſolidity in it; of any two of theſe, I ſay, God could not have placed the one in *any poſition*, or in any *particular body*, rather than the other, not having a reaſon to determine the preference. Again, ſince all might have been adjuſted after the ſame manner as at preſent, if the heavenly bodies had moved from eaſt to weſt, inſtead of moving from weſt to eaſt; it follows, that God could not have made them move either way, not having a ſufficient reaſon to determine which of the ways. Thus, according to this principle, God could not have made the world at all, nor the leaſt thing in it; for ſuch reaſons will hinder every thing; and this *moral neceſſity* extended beyond its bounds into barely *phyſical circumſtances*, ties down the power of the *Deity* more rigidly than *fatal neceſſity* itſelf. If it be aſked, *Doth ever God act then without a ſufficient reaſon for the action, and a wiſe view?* I anſwer, he doth not: but the *ſufficient reaſon of action* is taken from the nature of the whole effect, the uſe and deſign of it; not from phyſical circumſtances in themſelves indifferent. God had the *moſt ſufficient reaſon*, and the wiſeſt deſigns to anſwer in creating the world, which are not, cannot be fruſtrated, by there being one atom more or leſs of matter in it, by its being created a minute ſooner or later, by its exiſting in the preſent portion of Space rather than another; and we groſly miſplace the ſufficiency of the reaſon, when we lodge it in *the indifference of phyſical things*; and, in truth, it is no better than to make a ſlave of the Deity to deny his power to accompliſh an end, becauſe there are more ways than one by which it might be equally well effected. If it ſhould be ſaid, "We are not to ſuppoſe *ſuch indifference* even in *phyſical circumſtances*; nor therefore that *God* could have made "the *leaſt variation* in theſe, without a *ſufficient reaſon* to determine him?" I anſwer, Mr. *Leibnitz himſelf* ſuppoſes *ſuch indifference*, when he aſſerts, that there was no reaſon why God might not have placed *a finite quantity* of matter as well in one part of infinite Space as another. Beſides, reaſon forces us to make this ſuppoſition. Every *infinitely little variation* of phyſical circumſtances could not in the nature of things have had a *different ſufficient rea-*

XIX. Having ſhewn that matter is not eternal *in any ſenſe*, one is naturally led to obſerve, that the great and only objection againſt its *having been created*, is the old maxim, *From nothing nothing can be produced, nor can any thing return to nothing.* But this is of no force, when aſſerted in oppoſition to the efficiency of *infinite power*; unleſs it could be ſhewn that the creation of matter implies a contradiction, which cannot be done. For how can it be ſhewn that creation *ex nihilo* by *infinite power* is a con-

ſon to determine it. Let us remember that *extenſion is infinitely diviſible*, in which ſingle reſpect there will ariſe an infinite number of infinitely little variations in producing the meaneſt phyſical effect, every one of which muſt nevertheleſs have been determined by a *ſeparate ſufficient reaſon*: for if any two of ſuch infinitely ſmall variations had been without their determining reaſons, *an indifference* would have ſtood in the way, and the effect have been ſtopt for ever. *Ex. gr.* God muſt have had *millions* of *differerent reaſons* to determine whether the *annual orbit* of the earth ſhould have been half an inch larger or leſs than what it is; for there are millions of variations between theſe extremes: nay, to determine whether one ſingle hair of a man's head ſhould have been half an inch longer or ſhorter, for, even this comes not to paſs without his immediate power. And the ſame is to be ſaid of the *diviſibility* of time, *variability* of the celerity of motion, of its *direction*, with other numberleſs particulars.

Now to apply this to the preſent argument; Since any aſſignable portion of time, a minute, *v. g.* is as infinitely diviſible as extenſion, ſuppoſing there was a ſufficient reaſon determining the commencement of matter to *a certain hour*, nay *to a minute* of that hour, ſtill God wanted an infinite number of other determining reaſons whether it ſhould commence at one rather than another of theſe infinitely little *tempuſcula*. For if the reaſons *for any two* had *coincided*, theſe two would have been indifferent, to the ruining of this ſcheme; or elſe the *equilibrium* whether creation ſhould have commenced the millionth part of a minute *ſooner* or *later*, muſt have kept God in *eternal ſuſpence*, and made the exiſtence of his rational creation impoſſible! Thus, as I ſaid, this ſcheme makes the reaſonableneſs, the wiſdom, and the goodneſs of God in all his works depend on the determining the indifference of phyſical circumſtances, *abſurdly*; and ſetters his power even more rigidly than *ſtoical fate*. It makes him *(abſit blaſphemia) the Aſs between the two bundles of hay*, or *the needle between the two loadſtones*. What pleaſure can men take in endeavouring to ſhew that both God and themſelves are *ſlaves!* For this new-invented neceſſity extended over man deprives him not only of ſelf-motion but the power of willing; of which in another place.

We are to ſay then, that God hath a wiſe end in producing every effect; but that his own will is ſufficient to determine him which of two or more indifferent means he ſhall uſe in producing it. And ſince we ſee that a world is really created, we muſt ſay this; unleſs men will run back to *fatal neceſſity* for determining the indifference of phyſical circumſtances, and incur the abſurdities ſhewn in the laſt Note.

From this reaſoning it follows, That *liberty* conſiſts not only *in acting according to moral motives where they are*; but in *ſelf-determination by the power of the will, where circumſtances are indifferent*; and that in the *Deity* himſelf.

tradiction,

tradiction, unleſs by denying ſuch power altogether? And ſince *infinite power* implies no contradiction, it muſt at leaſt *be poſſible:* and if it be poſſible it muſt *be more*, viz. *neceſſary*, ſince it is a thing that cannot be *produced by any Being*, which production we muſt ſuppoſe when we ſay, *a thing is poſſible*; a thing poſſible to *no Being* is impoſſible. And I have ſhewn elſewhere (ſee ſect. 4.) the abſurdity of ſuppoſing that *any power* (*finite* or *infinite*) ſhould be only *caſual*, or *accidental in nature* (*s*). As to the *maxim* itſelf; men indeed obſerving that in the *natural generation* and *corruption* of bodies, there was not *any production* of *new matter*, nor *deſtruction of old*, but only *a change* of the ſenſible qualities or accidents, ariſing from a change of *figure*, *poſition*, *&c.* ſettled this into a maxim in that caſe, That from nothing nothing could ariſe, nor any thing return to nothing; by the law of generation and corruption, that now obtains. And ſo far it was a good obſervation certainly, gathered from experience: but there was no *neceſſary connexion* between the *ideas* in it, why it ſhould always be ſo, and impoſſible to be otherwiſe, (as there ought to have been to make it a *firſt principle*) otherwiſe men needed not have been beholden to experience for it, as they were (*t*), but would neceſſarily have ſeen it, or might at leaſt have collected it from abſtract reaſoning. And how could men, by obſerving the law of generation and corruption that now obtains, collect that it was impoſſible to be otherwiſe, but by *ſuppoſing that law never to have had a beginning*, nor to have been *inſtituted by an infinitely wiſe and powerful Being*, but the effect of *ſtupid neceſſity*, predominating in all things, and over all things; itſelf nothing, and belonging to nothing, as *Lucretius*, the great Abettor of this principle, did, who notwithſtanding of his *other principle*, *chance*, is forced to have recourſe to an *unſupported neceſſity* here? Beſides, it is to be noticed that this maxim is not demonſtratively certain even in the caſe of *natural ge-*

(*s*) See the argument in the Note (*q*) where *infinite perfection* is ſhewn neceſſary.

(*t*) See *Lucretius*'s arguments for this; after abundance of other examples to prove that *nothing can ever ariſe from nothing, or be reduced to nothing*, he ſays,

Poſtremò, percunt imbres, ubi eos pater æther
In gremio matris terrai præcipitavit.
At nitidæ ſurgunt fruges, ramique vireſcunt
Arboribus: creſcunt ipſæ, fœtúque gravantur.

And at laſt he concludes,

Haud igitur penitus pereunt quæcunque videntur;
Quando aliud ex alio reficit natura: nec ullam
Rem gigni patitur, niſi morte adjutam alienâ. Lib. 1. ver. 250.

neration

neration and *corruption*. The thing ſeems to be true and reaſonable; but the means of obſerving fail men before they come to the *ſubtilty* of *nature's work*, and the *firſt principles* of body in theſe operations: and after that, all the experiments men can make, and all their obſervations, will never amount to demonſtrative certainty. What arguments could a man oppoſe to one who denied the *maxim* to hold even in *generation* and *corruption?* None ſurely but making him obſerve the *inſtances of generation*, and *corruption* themſelves: which ſhews the truth of what I here affirm. It is true, we ſay *God and Nature do nothing in vain*; and this is moſt certain: but the queſtion recurs, *What is vain to be done? Eaſe* and *difficulty* with reſpect to *us* are not applicable to *infinity of power* (*u*): and in this *laſt axiom* infinity of power is ſuppoſed. If then, even in the caſe of generation and corruption, this *maxim* falls ſhort of the ſelf-evidence of an *axiom*, or *intuitive truth*, how can it be oppoſed to the poſſibility of *creation* by *infinite power?* Or where is the force of it compelling men to aſſert that *brute-matter*, a thing entirely of a paſſive nature, by their own conception of it, ſhould be ſelf-exiſtent?

(*u*) We may obſerve in the *works* of *nature* [an apparent] frugality of *means* indeed; but a great profuſeneſs and magnificence of *materials*. This we ſee in the exuberancy of *ſeed* annually produced from ever plant and vegetable: there is a great deal allowed for *waſte*, ſo to ſpeak. But pardon me, if I ſhould endeavour to correct the firſt part of this obſervation, which regards the *frugality of the means* in producing any natural effect. We underſtand this, as if *ſmall power* was applied, to bring to paſs the *greateſt things*, which is altogether wrong. The power of the *Deity himſelf* is every where applied, in the minuteſt circumſtances, and in bringing to paſs things to us the moſt contemptible. How can this be a *frugality of means?* There is indeed an admirable *Simplicity* in the *method*, and an *uniform law* obſerved in the production of the ſeveral kinds of *plants* and *animals*, as much as is conſiſtent with the variety of the ſpecies. This teaches us what we are to think of the *wiſdom* of this Being. The method is varied by imperceptible degrees through all the tribes of the vegetable and animal kingdoms; and oppoſite extremes are thus joined by gentle and eaſy tranſitions. Even here then there is a *richneſs*, a *profuſeneſs* of invention and contrivance. And the ſame efficacious Power is *every where* exhibited, to teach us what we are to think of *him* in this reſpect of his Omnipotence. It is ſo far from being true, that great things are brought to paſs by ſmall power, that, on the contrary, a ſtupendous power is manifeſted in the moſt ordinary *appearance* of nature. This the excellent *Borelli* firſt obſerved in animal motion; and the ingenious Mr. *Hales*, by a courſe of happy experiments, hath ſhewn the ſame in the force of the aſcending ſap in vegetables. And ſince all is performed by the immediate power of the Deity; the *means*, the *method*, the *materials*, in every production of nature, declare him to be infinite in *power*, in *knowledge*, in *goodneſs*.

XX. *Lucretius* makes this his *firſt principle*, and the *ground-work* of his whole book (*v*): but his reaſoning upon it is looſe and frivolous. He argues from *generation* and *corruption*, to the *firſt production* of matter; as if the *firſt formation* of the material world, and the *creation of matter*, were to be accounted for *by the ſame mechanical laws* that now obtain in it, as it is *formed*; telling us if natural bodies *roſe ſpontaneouſly out of nothing*, (as if ever men had ſuppoſed this without a *divine power*) we ſhould ſee men *ſpring out of the ſea*, fiſhes and birds from *the earth*, and herds of cattle *burſt out of the clouds* (*x*): and thence infers, that matter could not at all have

(*v*) *Principium hinc cujus nobis exordia ſumet*
Nullam rem à nihilo gigni divinitus *unquam.* Lib. 1. ver. 150.

And this principle he propoſes as an excellent remedy againſt the fear of any ſuperior power.

Quippe ita formido mortalcis continet omneis,
Quòd multa in terris fieri cœlóque tuentur,
Quorum operum cauſas nulla ratione videre
Poſſunt, ac fieri divino Numine *rentur.*
Quas ob res, ubi viderimus nil poſſe creari
De nihilo; tum, quod ſequitur, jam rectius inde
Proſpiciemus, & unde queat res quæque creari,
Et quo quæque modo fiant, operâ ſine Divûm. Ibid.

(*x*) *Nam ſi de nihilo fierent; ex omnibu' rebus*
Omne genus naſci poſſet: nil ſemine egeret.
E mare primùm homin's, è terrâ poſſet oriri
Squammigerum genus, & volucres: erumpere cœlo
Armenta, atque aliæ pecudes: genus omne ferarum
Incerto partu culta, ac deſerta tenerent:
Nec fructus iidem arboribus conſtare ſolerent,
Sed mutarentur: ferre omnes omnia poſſent, &c. Ibid.

Here he firſt excludes *all divine power*, and then ſuppoſes, if creation *ex nihilo* were poſſible, *things ought to ſtart up out of nothing* every Day: He makes the greateſt inſtances of *government* and *ſuperintendence*, *viz.* the *regular obſervation* of the *ſeveral ſpecies* in natural productions, ſo many *arguments* againſt a *ſuperintendence*, and by a ſtrange *piece of logick* aſcribes all to a *negative efficient*. If any *modern Sceptick* ſhould not have had leiſure to conſider the reaſons upon which he rejects the *Deity* and his *ſuperintendence* in nature; theſe are the *great principles*, and *baſis* of his belief, as *fair* as I am able to repreſent them; and leſt I may have made a miſtake inadvertently, I have cited the *Original*. I ſhall only mention another argument for the eternity of matter, which is, "That, if it had not been eternal, all things would long ago *have fallen into nothing*, and *ſprung up again out of nothing*."

Præterea, niſi materies æterna fuiſſet
Antehac, ad nihilum penitus res quæque redirent,

De

have been created, ſhuffling in an *univerſality* into his concluſion from *very limited* premiſſes (y).

De nihiloque renata ſorent, quæcunque videmus,
At quoniam ſupra docui nil poſſe creari
De nihilo, *&c.* Ver. 541.

(y) Anſwers to metaphyſical queſtions muſt be unentertaining to the greateſt part of Readers, and perhaps ſcarce intelligible to any but thoſe who could ſtart the difficulties: however, I ſhall venture to add one Note more of this kind here, as in a place that will give the objection contained in the following Queſtion, the greateſt advantage. I had no deſign to enter into theſe *nice diſquiſitions*, at leaſt in this place; but as a remarkable difficulty hath been occaſioned by what I have advanced againſt *eternal uncauſed matter*; if a rational ſolution can be offered, perhaps the ground of ſtarting ſuch difficulties may for the future be removed, and the truth more readily embraced. The queſtion is; "If *indifference* as "to the manner of exiſting is inconſiſtent with *neceſſary exiſtence*, are not all the actions of "a neceſſarily exiſting *Being* what may be conſidered as the *manner* of his exiſtence, and "therefore *neceſſary?*" This Queſtion carries the greateſt difficulty with it, when conſidered with reſpect to the *creation* of the Univerſe, which is, as it were, the *beginning* of a new period in the *eternity of God:* for after creation, the *work of Providence* commences, and the conſtant ſuper-intendence of all his creatures, which ſeems a *new ſcene* of affairs to the *Deity:* ſo that we muſt either allow ſome *change* (with reſpect to action) in him, and therefore in the manner of his exiſtence; or if otherwiſe, his actions muſt be *as neceſſary* as the manner of his exiſtence; and then we muſt admit of the conſequences of this phyſical neceſſity, which leaves him *a Being* whom we need not regard. To this I anſwer, firſt, That it hath been ſhewn above, to ſatisfaction, I hope, *That indifference as to the manner of exiſtence is inconſiſtent with neceſſity of exiſtence*, or that *the manner of neceſſary exiſtence is itſelf neceſſary*; as alſo, *That the actions of the Deity cannot proceed from a phyſical neceſſity*; that would only make him a powerful, *but ſtupid Being*, (*i. e.* having power without intelligence) which is inconſiſtent with the *neceſſity of infinite perfection.* Now theſe *two points* being proved true ſeparately, and independent of each other, the right method of going on in the inveſtigation of the truth will be, to draw *this corollary* from them joined together, That *theſe actions* of the Deity, becauſe *not eternal*, cannot be conſidered as the *manner* of his exiſtence; and that, though free, they yet produce *no change* in the manner of it. And if I had made this a *conſequence* from theſe two points, every one muſt have granted, that I proceeded according to the method of demonſtration, and that therefore the *concluſion itſelf* was unexceptionable. It can never be allowed, that what may follow as a *conſequence* from a propoſition proved, may be made an *objection* againſt it. Such a method would overturn all geometry. Inſtances of which I need not give. Dr. *Barrow*, after a *Theorem* of *Euclid* (16 El. 3.) ſays, *Ex hac propoſitione paradoxa conſequuntur, & mirabilia bene multa.* It would be hard to make one of theſe *wonderful conſequences* an objection againſt the demonſtration from which it follows. This is that caſe, in which we know certainly *that a thing is*, but know not *the manner* how it is; and the preſent point is an inſtance of it. It is certain, that God doth not act from a *phyſical neceſſity*, and that the *manner* of his exiſtence *is immutable*; whence it follows that *his actions, though free, do not change the manner of his exiſtence:* this, I ſay, is certain; but *the manner*

how it is exceeds our comprehenſion. And yet (with that humility which becomes us when we ſpeak of this *infinite, wonderful, adorable Being*) we may go a little farther in this point, and reaſon thus.

If a rational mind is *very finite*, as ours is, it can have but *one object* under view at once, or one particular thing under the conſideration of the intellect at a time; and it can therefore *will* but *one thing* to be done at once. This we can eaſily conceive from our own experience. But if the mind be *leſs limited*, or perfecter in kind, which, as not involving contradiction, I have liberty to ſuppoſe, it will be able, as ſuch, to have *two objects* under the conſideration of the underſtanding at once, and to *will* two diſtinct things to be performed at once: and its *power*, correſponding to its *other perfections*, will be able to perform both at once. And, without mentioning other intermediate degrees, we may imagine the progreſſion to go on. Now, if we ſuppoſe the mind to become at laſt *infinite*, or all limits to be taken away from it, it muſt *(as ſuch)* have an *infinite number of objects* under the intuition of the intellect at once, or an infinite number of things all in view at a time; and this by the ſame kind of reaſon as a very finite mind can have but one; and be able to *will* an infinite number of things all to be done at once: and its *power* being alſo infinite, or without limitation, it will be able to perform them all at the ſame time, without *perplexity* or *diſorder* (inſtances of which I hope have appeared, when the *various, indefinent, univerſal action* of an *immaterial Being* upon all the parts of matter, in all places, and at all times, was ſhewn to be neceſſary to ſupport the material world.) This, I ſay, it will be able to do *quà infinite*. Infinite perfection directly implies this; and it would be abſurd to deny it, becauſe we cannot conceive the *manner* of it.

This *firſt ſtep* being duly weighed, let us next conſider this Infinite Mind as *neceſſarily exiſting*, and in that reſpect it muſt have had an *infinite number of objects* under the view of the intellect, not only *once*, but *always*. Neceſſity of exiſtence doth not *limit* infinity of perfection, but *ſhews that infinity neceſſary and eternal*. It would not be having an infinite and neceſſary underſtanding, *(i. e.* a *neceſſarily infinite underſtanding)* to be able to comprehend an infinity of things *at once, and for a little only*, and then to *wink* and *relax*: we muſt own that ſuch an underſtanding muſt have had a comprehenſion of infinite things, *(i. e.* an *infinite comprehenſion)* neceſſarily and eternally. Thus then a *neceſſarily infinite intellect* muſt have had all objects neceſſarily and eternally in view, and under immediate proſpect. And this is the main point gained. This is *infinite knowledge!* And ſuch a Being muſt have had infinite knowledge by a *phyſical*, or *natural neceſſity*; even thoſe who are leaſt attentive muſt ſee that the terms all along imply it. But mark, *This is a phyſical neceſſity of perfection*, as it ought to be. To make the Being *free* here would be to make it *imperfect*: we might as well ſay, *free to exiſt neceſſarily or not*, as free to have infinite knowledge or not to have it.

The next thing to be conſidered is, that *this Being* having all things always and neceſſarily in view, muſt always and eternally *will* according to his infinite comprehenſion of things; that is, *muſt will* all things that are *wiſeſt* and *beſt* to be done. There is no getting free of this conſequence. If it can *will* at all it muſt *will* this way. To be capable of knowing and not capable of *willing* is not to be underſtood; and to be capable of *willing* otherwiſe than what is *wiſeſt* and *beſt* contradicts *that knowledge* which is *infinite*. Infinite knowledge muſt direct the *will* without error. Here then is the *origin* of *moral neceſſity*, and that is really of *freedom*: for the Being is not determined to this conſtant and eternal act of *willing*, by a *phyſical energy* or *power* conſtantly acting, but from the knowledge of the *eternal aptitudes* and *agreeableneſs of things* to each other; or in other words, from the intuition of the *eternal relations*

lations of its own *ideas*, which are the *archetypes* of things. Indeed to *will* by a physical necessity, or by the *determination* and *impulse* of an external physical cause, is, when nearly considered, a direct contradiction; it is not to *will*, but to be *involuntarily determined*, the same as to say, *to will whether a thing wills or not*, or *to will* against the *will*. Perhaps it may be said, when the *divine will* is determined from the consideration of the *eternal aptitudes of things*, it is *as necessarily determined*, as if it were *physically impelled*, if that were possible. But it is unskilfulness to suppose this an objection. The great principle is once established, *viz.* That the *divine will* is determined by the eternal reason and aptitudes of things, instead of being physically impelled: and after that the *more strong* and *necessary* this determination is, the *more perfect* the *Deity* must be allowed to be. It is this that makes him an *amiable*, an *adorable Being*, whose *will* and *power* are constantly, immutably, determined by the consideration of what is *wisest* and *best*, instead of a *surd Being* with *power*, but without *discerning* or *reason*. It is the beauty of this necessity that it is as strong as *fate* itself, with all the advantage of *reason* and *goodness*. This *constant act of willing* proceeds from his *knowledge*, it is true; but as proceeding from knowledge, it is to be considered as *determined by knowledge*; and knowledge must be considered as having a *priority of nature*, though not *of time*. Hence the wonderful nature of the *divine will*, that it is both *immutable*, as proceeding from a *necessary physical perfection*; and yet *infinitely rational*, as being the issue of *infinite* and *true knowledge*, or the knowledge of all truth. It is strange to see men contend that the *Deity* is not free, because he is *necessarily rational, immutably good* and *wise*; when a *man* is allowed still the perfecter Being, the more fixedly and constantly his will is determined by reason and truth. *Liberty*, as I have said before, *consists in being determined by moral motives* (the more unerringly and constantly the better) in opposition to being *physically impelled*, (which indeed takes away the act of willing, or any act, properly speaking) and in *self-determination* by the power of the will amidst the *indifference* of physical circumstances. And let it be here remembered that all this follows easily and without the trouble of such a long deduction, when once it is shewn that there is a *necessity of infinite perfection*, that is, of a *Being infinitely perfect*, which appears from what is said above; for since all this is a perfection, it must be in *that Being*. And who, though ever so much engaged on the opposite side, will venture expressly to say that *to be determined by moral motives* is not a perfection? Or to be *self-determined* by the power of the will, where physical circumstances are *indifferent*, in order to effect a wise and good purpose, is not a perfection?

But to go forward, if next we consider the actions of this Being as exerted upon his creatures in consequence of this eternal act of willing, they are *(as in consequence of that)* guided by the absolutely greatest *council* and *wisdom*, and therefore performed in the *fittest time, manner, circumstances*. But what is chiefly to the present purpose is, that though vast power is exerted, as in *moving* the heavenly bodies, for instance, yet it is exerted without *struggle, effort* or *contention of strength*, so to say. *Ease* and *difficulty* are not applicable to *infinity of power*: they are the marks of our limitation, but vanish here. That power would not be infinite, by which one thing were done *smoothly*, and another thing with *rugged labour* and *toil*. Let him who hath the term [*infinite power*] often in his mouth, consider only the import of it. *To perform* is equally easy as *to will* to this Being, and that without a figure, but upon the foot of reason and argument. All this is still implied in *necessary infinity of perfection*. And this at length will help us to conceive that *even the actions of this Being* no more change the manner of his existence *than his willing them*, there being no *emotion, stress* or *contention* in performing the effect that might occasion *an alteration*. Nor can they be considered as the manner of his existence;

iſtence; ſince they are *temporary, ſucceſſive* (as in the motions of matter) and *not neceſſary*, as it muſt be.

We ſhall better conceive this, if we conſider *why*, and *how*, our *manner of exiſtence* is conſtantly changed; and this particular deſerves our attention. In ſhort, this happens in our bodies from *motion, relative ſituation*, and *a conſtant flux of parts*; from all which an immaterial Being muſt be free. In our minds the manner of exiſtence is changed from a *conſtant ſucceſſion of ideas*, and the occurring of *new objects, new deſires*, and the *willing new effects* to be produced. This happens from the finiteneſs of our minds. If we have any *compaſs* of thought, knowledge, ideas, will, it muſt be by the *ſucceſſive admiſſion of new objects* into the mind. In an *Infinite Mind* it is quite the reverſe of this: all things muſt be always and eternally in view, whence no *new object* of deſire can happen, nor therefore *change in the will* (which is the great ſource of the change of the manner of exiſtence in our minds); and though the actions are performed *in time*, and commenſurately with the *ſucceſſive exiſtence* of creatures, yet this is without *change of thought, motion*, or any kind of *alteration*: it is without calling the attention from *other things*, to apply it to *that thing*; or calling the power from *other places* to apply it in *that place*. This is a wonderful ſuperiority of nature; ſo far above our way, that we are ſtruck with admiration at the thought: and yet the certainty of the concluſion will make one contemplate it with pleaſure.

It was from theſe conſiderations that *Boëtius* defines the eternity of God to be *vitæ interminabilis tota ſimul & perfecta poſſeſſio* (De conſol. phil. lib. 5. prof. 6.) for in a *neceſſarily infinite intellect* all things muſt be *always* and *neceſſarily* preſent; from *neceſſary infinity of knowledge* all the purpoſes of wiſdom and reaſon muſt be *willed* by one *indefinent act*: no new object can offer to the underſtanding, no mutability can happen therefore to the *will*, nor therefore can there be any *riſing* or *falling* of pleaſure and happineſs. And this is indeed *interminabilis vitæ tota ſimul & perfecta poſſeſſio*; which coincides with this, *That the manner of neceſſary exiſtence is itſelf neceſſary, and neceſſarily the beſt. Quod* (ſays this Philoſopher) *ex collatione temporalium clarius liquet; nam quicquid vivit in tempore, id præſens à præterito in futurum procedit: nihilque eſt in tempore conſtitutum, quod totum vitæ ſuæ ſpatium pariter poſſit amplecti.* This is undeniably a mark of imperfection *to live by change, to loſe what is paſt, to want what is yet to come*, and to place infinite happineſs in a ſucceſſion of things, though all pleaſant. If any ſtate were good, why ſhould it paſs? If any thing will be pleaſant, why ſhould it not be preſent? Why ſhould it be firſt in expectation, a minute in enjoyment, and then in reflexion only? This, I ſay, is plainly a mark of imperfection; it is our own ſtate; and therefore to be denied concerning a *Mind* infinitely perfect. If the *Roman Conſul* had gone into the ſceptical ways of thinking now faſhionable, he would not have left us ſuch a *noble*, ſuch a *philoſophical*, ſuch an *exalted idea* of the Divine Mind. See here *Dr.* Clarke's *Demonſtrat.* Part 1. Prop. 5.

Laſtly, To obviate the main thing objected; from all this we may ſee that when *God* created the Univerſe, as there was no *new object* of knowledge preſented to his *Intellect*, nor *new deſire* to his *will*, ſo there was no *new difficulty* ſtarted to his *power*; ſince, as was above ſhewn, to *perform* muſt be equally eaſy to neceſſary infinity of power, as to *will* the performance. The creation of a world, the ſuperintendence of his own works, the methods of Providence, and the whole ſcheme of procedure, eſpecially with reſpect to rational Beings, were no *novelties* to him, but what he had in view, *familiar* (if I may ſo ſay) from eternity. Let it be obſerved here (leſt I ſhould be forced to make unneceſſary repetitions) what I have ſhewn above to be the import of a *neceſſarily infinite intellect*. In a word, after we have once more conſidered that, if there be *a neceſſity for any Being*, it muſt be for *infinite Being*; and if there be a neceſſity for *any perfection*,

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it must be for *infinite perfection* (it cannot be for *infinite* diminished by *any quantity*, in either case): after this, I say, it would be a low, unphilosophical prejudice to think that God could be lonely, and without entertainment, before the existence of his own effects, or put to any difficulty by them after they existed; that he could have bettered his condition by them, or that it would have been worse without them.

I cannot end this Note, though already too long, without saying something of the *unsuccessive existence* of the *Deity*, or of his *unsuccessive eternity*. This is an extremely metaphysical speculation, and there hath been much controversy about it. What we may say safely in it will also be easily seen, I humbly conceive, from what goes before. There is certainly no succession of *ideas*, *desires*, *will*, in the *Infinite or Necessary Mind*; and therefore no *change* or *mutability* in it. This follows when it is shewn that the manner of existence of a necessarily existing mind must be itself necessary and immutable, of which I have given two different demonstrative proofs above (N° 6 and 7.) Thus there is really no actual succession in the *manner* of *God's existence*, that is, in his eternity, nay, not after the existence of a material world. The changes and successions that then happen, happen to something else not to HIM. And yet, since the *successive* or *changing existence* of creatures is co-existing with the *unsuccessive* and *immutable existence* of the *Deity*, we may see that this *co existence* might have been ages sooner, or that the *one* doth not exclude the *other*, nor is inconsistent with it, but, as being infinitely greater, comprehends it. We see in another case, that though all *motion* (a mark of finity, and itself successive) is in *Space*, yet *Space* itself is *immoveable*. It is, as I am apt to think, something like this *successive* and *unsuccessive existence*, both *co-existing*, which *Aristotle* means, when he allows *time* to be *within* the *mundane limits*, but not *without them*. Consider his own words *(loco supra citat.)* Χρόνος δέ ἐστιν ἀριθμὸς κινήσεως· κίνησις δὲ ἄνευ φυσικῶς σώματος οὐκ ἔστιν· ἔξω δὲ τοῦ οὐρανοῦ δῆλόν ἐστιν, ὅτι οὔτε ἐστὶν, οὔτε γενήσεται σῶμα. As if he had said, "There is an *unsuccessive existence*, where-ever there are not changes and vicissitudes by motion." Thus far then, I think, we may go with clearness, and understand what we say. On the other hand, it is, I think, scarce intelligible, to apply this *successiveness* or *unsuccessiveness* (so to speak) to *time* itself, or to *eternity*, abstractedly taken: these seem applicable only to Beings existing the *one* or the *other* way. *Time* or *eternity* are only affections of Being, and nothing existing by themselves: therefore they seem capable of no alteration or change in themselves, abstracting from the Beings existing in them. If all *created Beings* were taken away, all possibility of any *mutation*, or *succession of one thing to another* would appear to be also removed. Abstract succession in eternity is scarce to be understood. What is it that succeeds? One minute to another perhaps? [—— *volit unda supervenit undam*]. But when we imagine this, we fancy that the *minutes* are things separately existing, which keep on their own course, though there were no Being at all existing. This is the common notion, and yet it is a *manifest prejudice*. Time is nothing but the *existence* of created, successive Beings, and eternity the *necessary existence* of the Deity. Therefore if this necessary Being hath no change or succession in his nature, his existence must of course be unsuccessive.

We seem to commit a double over-sight in this case: first we find succession in the *necessary nature* and *existence* of the Deity himself, which is wrong, if the reasoning above be conclusive: And then we ascribe *this succession* to eternity, considered abstractedly from the *Eternal Being*, and suppose it [—— one knows not what] a thing subsisting by itself, and flowing one minute after another. This is the work of *pure imagination*, and contrary to the *reality* of things. Hence the common metaphorical expressions, "Time *runs* apace." "Let "us *lay hold* on the present minute:" and the like. The Philosophers themselves mislead us by

by their *illuſtrations*. They compare *eternity* to the motion of a *point*, *running* on for ever, and making a *traceleſs* infinite line. Here the *point* is ſuppoſed a *thing actually ſubſiſting*, repreſenting the *preſent minute*, and then they aſcribe *motion* or *ſucceſſion* to it; that is, they aſcribe *motion* to a mere non-entity, to illuſtrate to us a *ſucceſſive eternity*. Hence all the perplexities of a *paſt eternity*, made up of *finite ſucceſſive parts*: and hence the contradiction of a *punctum ſtans*; though in this caſe a *punctum ſtans* is no more a contradiction than a *punctum mövens*: for in truth the *punctum* is nothing at all, either to *ſtand ſtill* or *move forward*. As to the expreſſion *nunc ſtans*, by which ſome *ſchool-men* have choſen to deſcribe eternity; it certainly implies oppoſite ideas, if applied to *our exiſtence*, or if our manner of exiſtence be applied to the *Deity*. For then we make [*nunc*] a relative term, which hath a reference to *paſt* and future. But this is a wrong application; and if once we allow an *all-perfect Mind*, which hath an eternal, immutable, and infinite comprehenſion of *all things*, *always* (and allow it we muſt) the diſtinction of *paſt* and *future* vaniſhes with reſpect to *ſuch a Mind*; and the expreſſion *nunc ſtans* will appear to have propriety. In a word, if we proceed ſtep by ſtep, as above, the eternity or exiſtence of the Deity will appear to be, *Vitæ interminabilis tota ſimul & perfecta poſſeſſio*, how much ſoever this may have been reckoned a paradox hitherto.

All this diffuſe reaſoning *may* (for the ſake of memory) be compriſed in two or three ſentences. For, firſt, An infinitely perfect *Mind* muſt have a perfect comprehenſion of *all things*, *always*: and then, *this Mind* muſt always *will* what is infinitely reaſonable, according to this infinite knowledge. From theſe two propoſitions it follows, That there can be no ſucceſſion of *ideas*, nor change of *will*, in ſuch *a Mind*. And, laſtly, it muſt be as *eaſy* to Infinite Power to *perform* according to the rule of infinite reaſon, as to *will* the performance; for ſuppoſing *difficulty* denies *infinity* of power. And hence the *actions* of ſuch a Being occaſion *no change* in the manner of his exiſtence; and yet, as *directed* by infinite reaſon, they cannot be *phyſically neceſſary*.

Thus we are come to the end of this tedious Enquiry *concerning the* Immateriality *of the human ſoul, where the nature of the ſubject hath carried us through all the moſt abſtruſe and difficult points of natural Philoſophy. The whole is ſubmitted to the judgment of the* Candid Reader. *If any thing of importance hath been diſcovered, which may give a contrary turn to the preſent prevailing ſceptical notions; this, with the variety and difficulty of the many things treated of, will, I hope, plead my excuſe for ſuch miſtakes as do not affect the main deſign.*

F I N I S.